

KENWOOD®
HI/FI STEREO COMPONENTS

SERVICE MANUAL

L-01A

An item of adjustment is written in three languages - English, French and German.

Un article sur réglages est écrit en trois langues, Anglais, Français et Allemand.

Ein Artikel der Abgleich wird auf drei Sprachen, Englische, Französisch und Deutsch geschrieben.

Caution

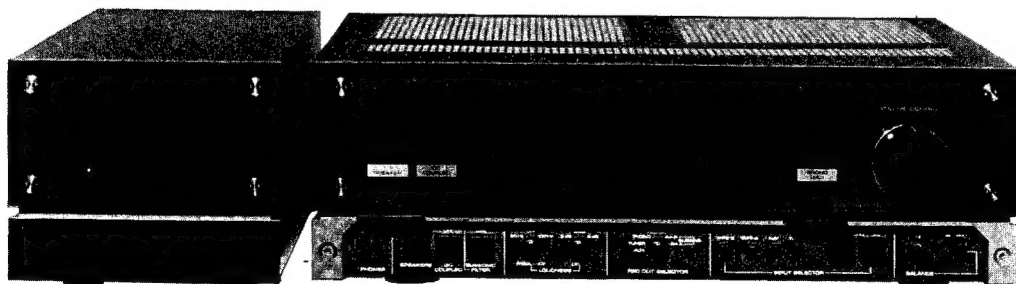
- Do not touch the copper plate with naked hand because it is liable to rust. If fingerprints are left on the plate, remove them with a steel brush.
- The cabinet is made of nylon resin. Do not place any hot object such as a soldering iron on the cabinet.

Avertissement

- *Ne pas toucher la plaque de cuivre avec les mains nues car elle est susceptible de rouiller. Si des empreintes digitales sont laissées sur la plaque, les nettoyer à la brosse métallique.*
- *Le coffret est en résine de nylon. Ne pas placer d'objets chauds tel qu'un fer à souder sur le coffret.*

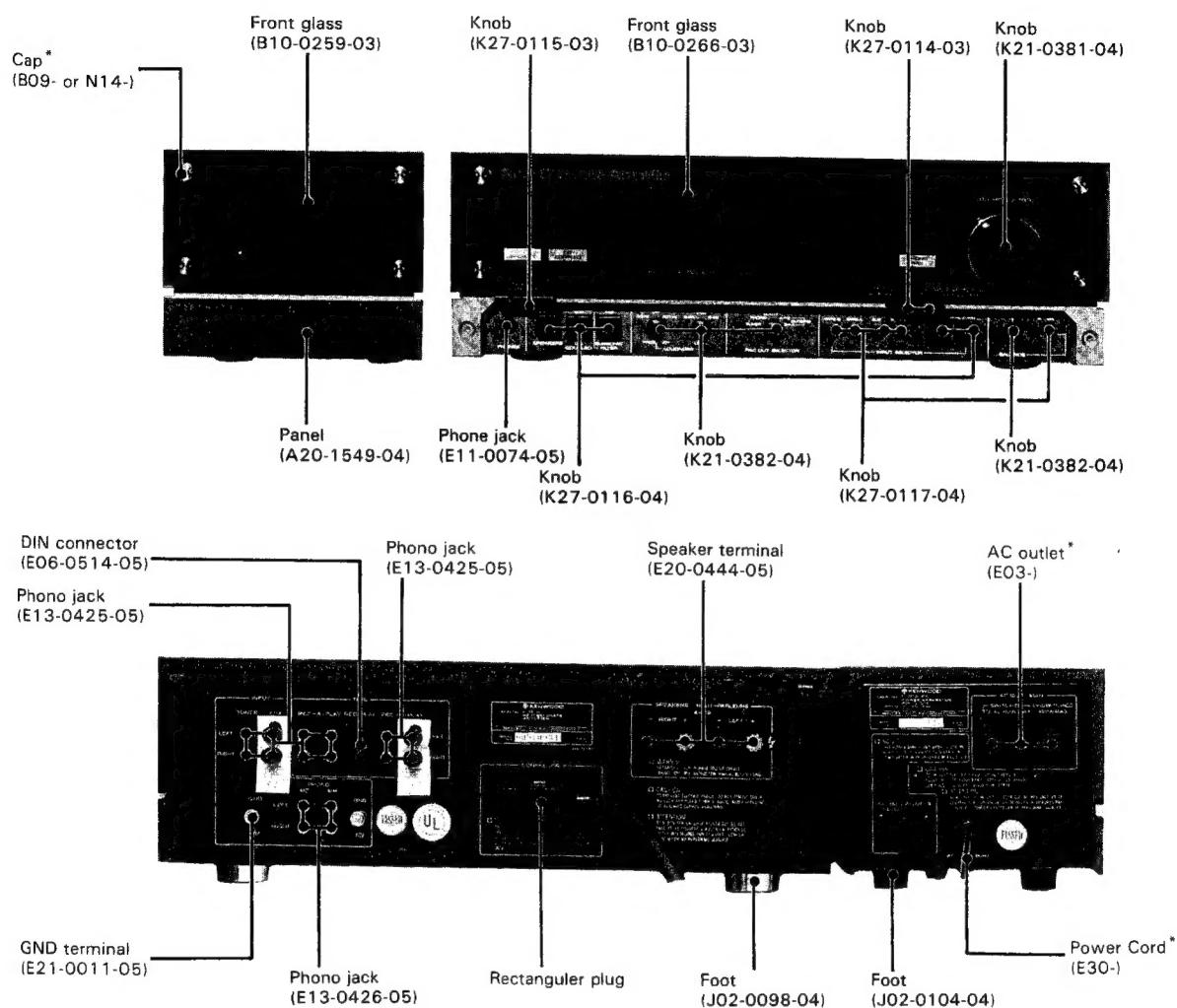
Vorsicht

- Die Kupferplatte nicht mit der bloßen Hand berühren, weil diese sonst rosten kann. Bleiben Fingerabdrücke auf der Platte zurück, diese mit einer Stahlbürste entfernen.
- Das Gehäuse besteht aus Nylonharz. Keinen heißen Gegenstand, wie z.B. ein Bügeleisen, auf das Gehäuse stellen.

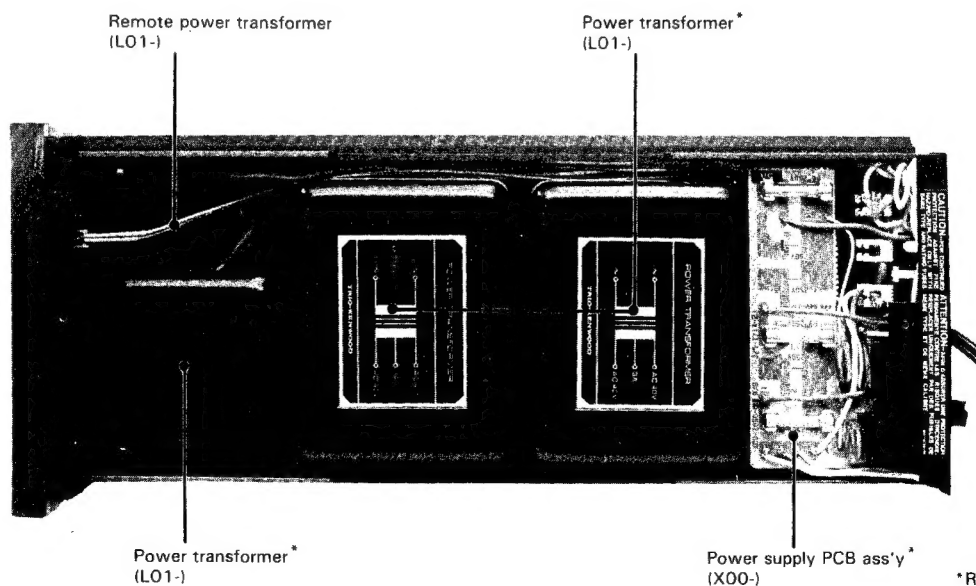


NEW SEPARATE AMPLIFIER

EXTERNAL VIEW / INTERNAL VIEW



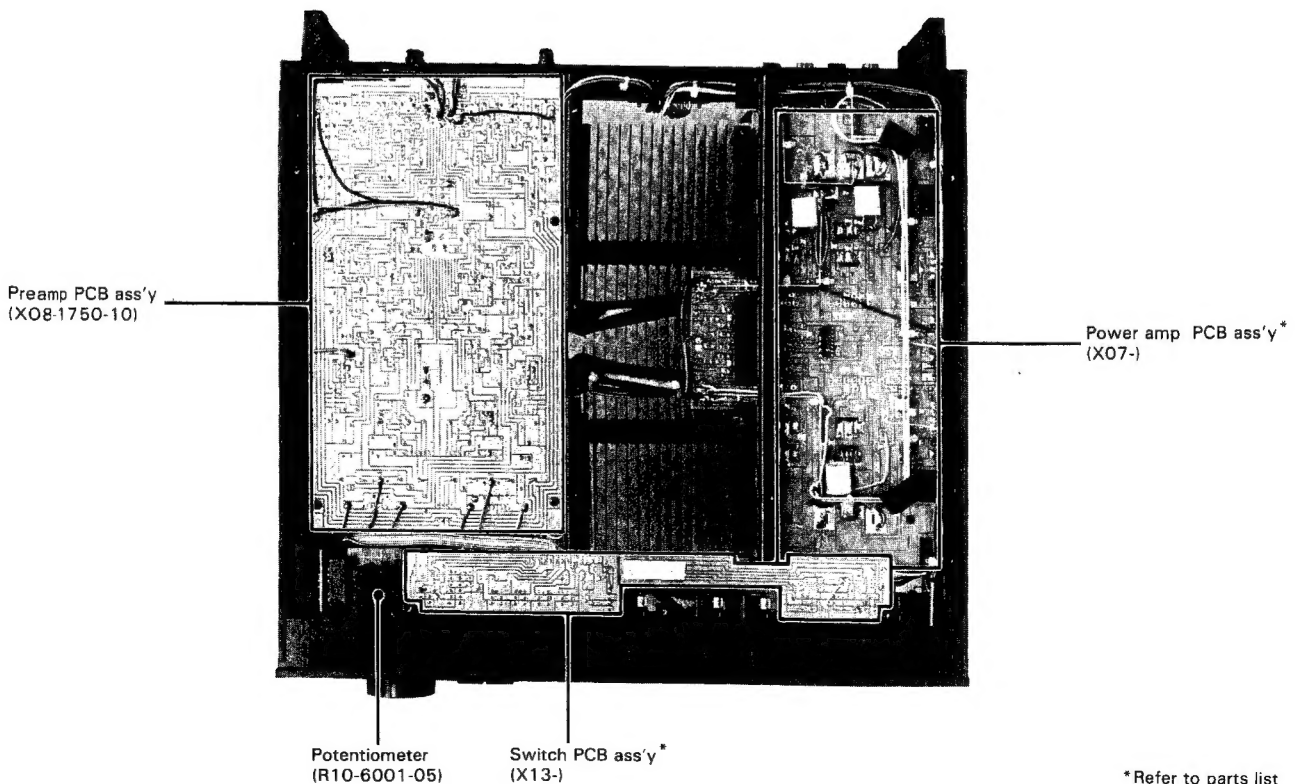
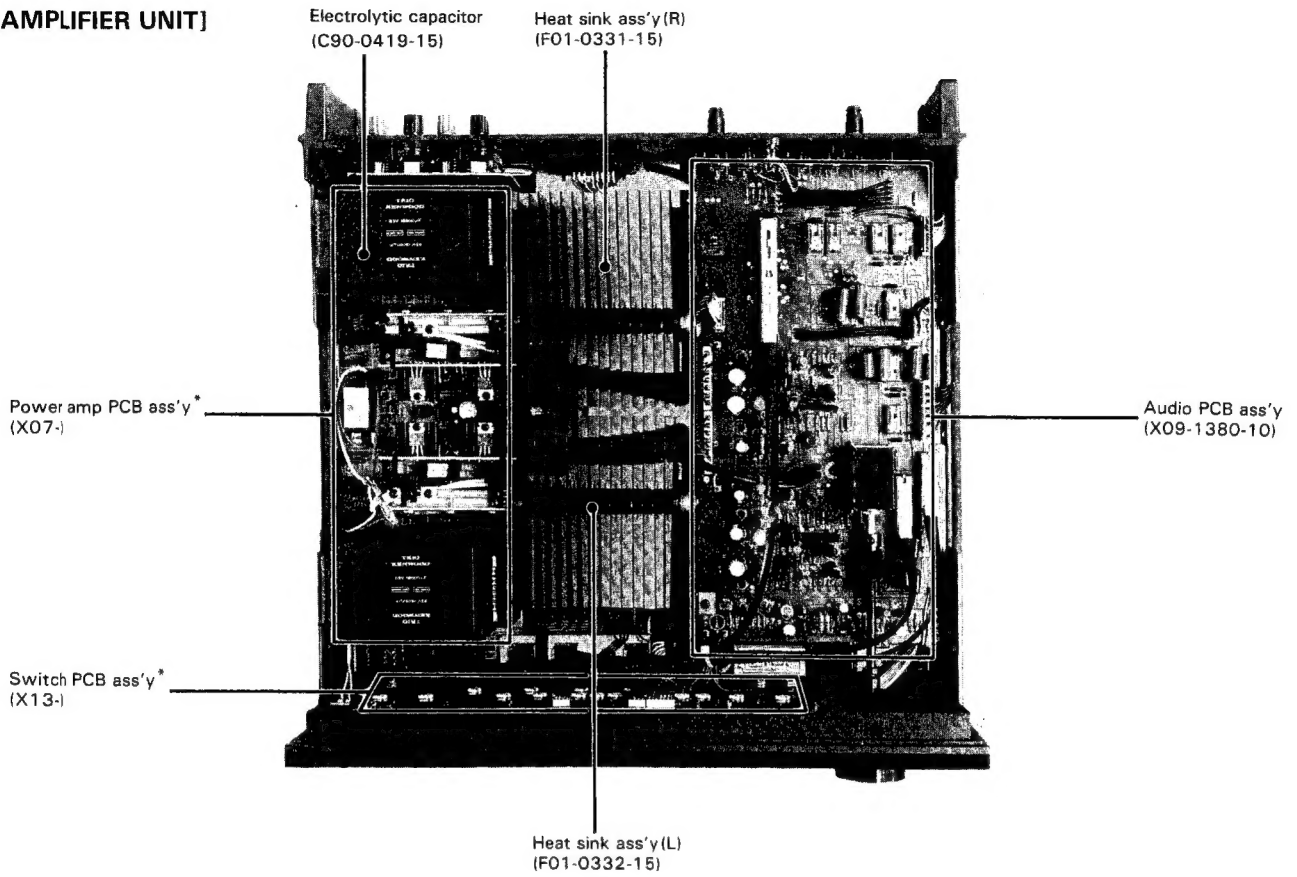
[POWER SUPPLY UNIT]



*Refer to parts list.

INTERNAL VIEW

[AMPLIFIER UNIT]

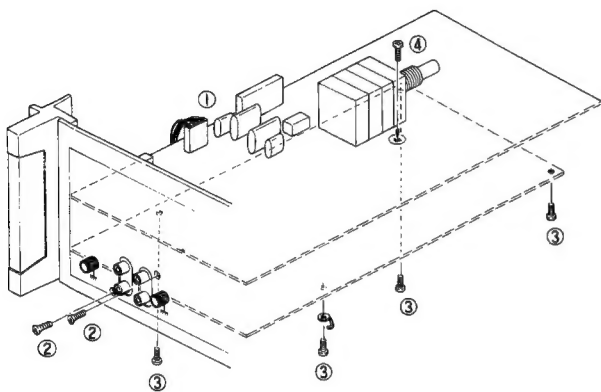


*Refer to parts list

DISASSEMBLY FOR REPAIR

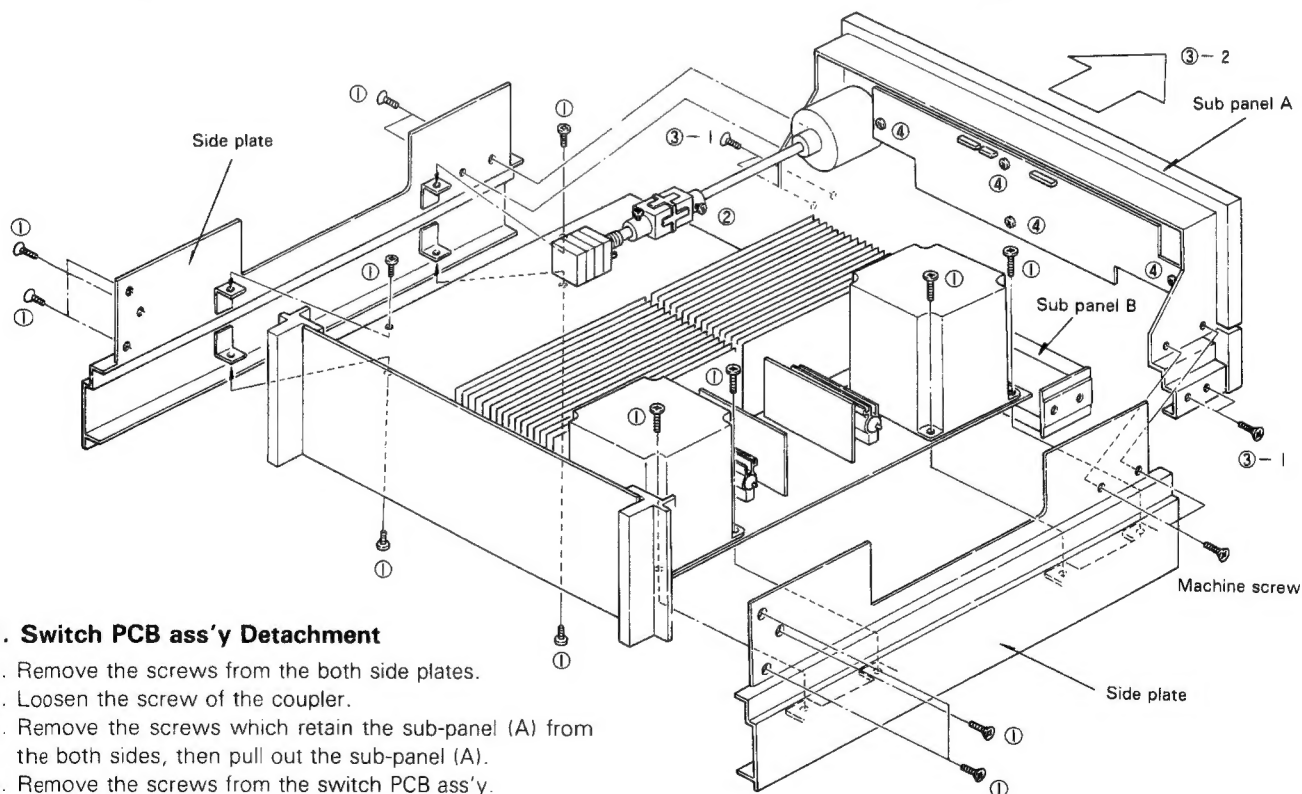
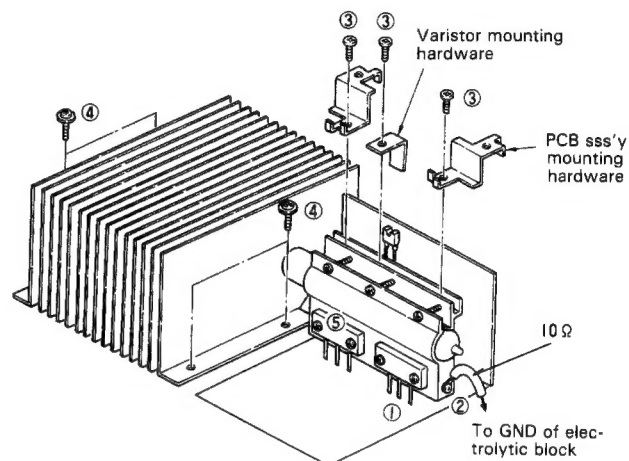
1. Preamp PCB ass'y Detachment

1. Pull out the connector.
2. Remove the screws from the PHONO terminals on the rear panel.
3. Remove the screws from the PC board from the bottom.
4. Remove the screw from the copper plate of the preamplifier.



2. Power Transistors Replacement

1. Unsolder the legs of the power transistors from the bottom side.
2. Remove the screw mounting the 10 Ω wire from the side of the heat sink.
3. Remove the varistor mounting hardware and the PCB mounting hardware.
4. Remove the heat sink mounting screws.
5. Replace the power transistors.



3. Switch PCB ass'y Detachment

1. Remove the screws from the both side plates.
2. Loosen the screw of the coupler.
3. Remove the screws which retain the sub-panel (A) from the both sides, then pull out the sub-panel (A).
4. Remove the screws from the switch PCB ass'y.

Note:

To replace the face panel, after steps 1—3, remove the screws which retain the panel from the bottom side.

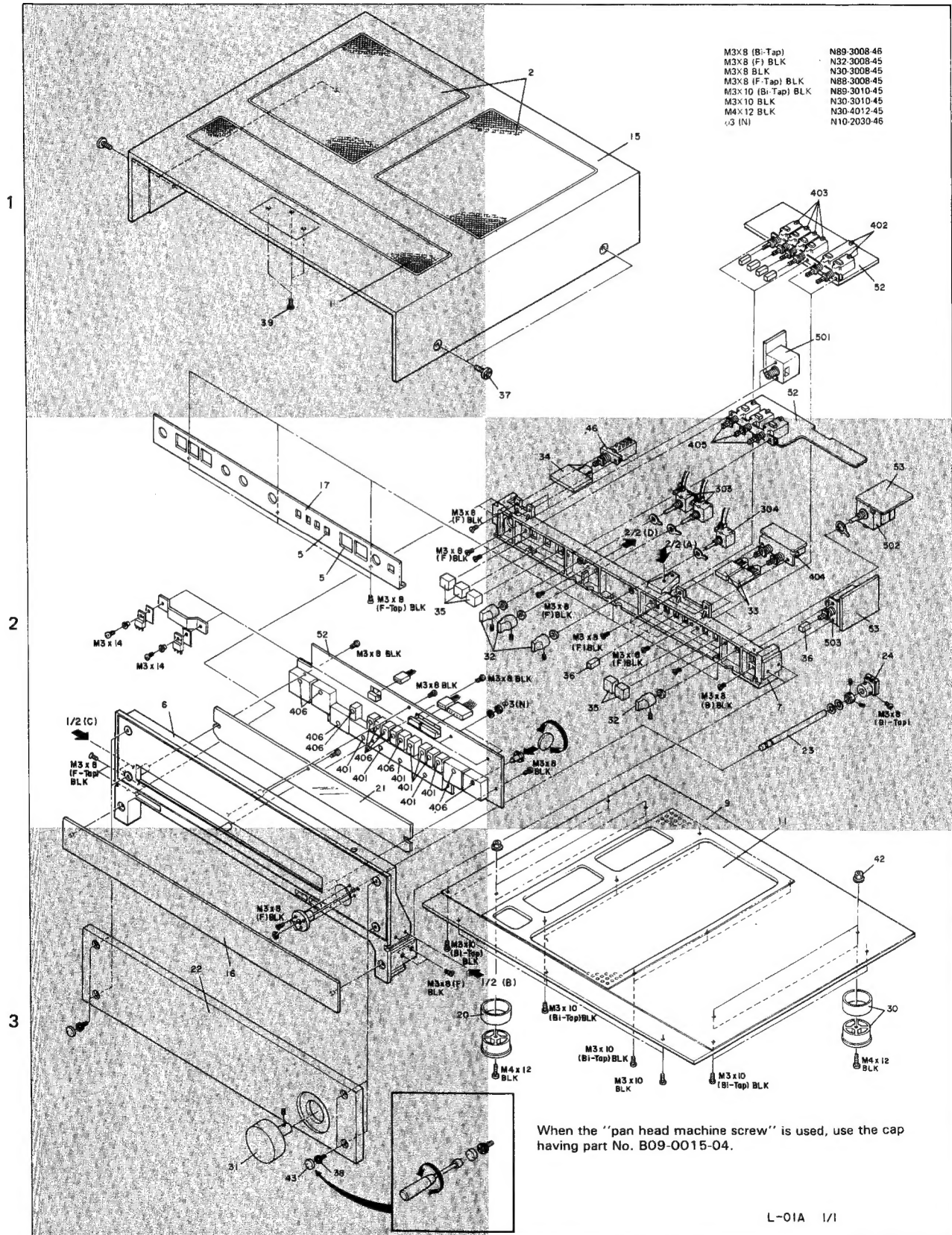
To remove the knobs (LOUDNESS, REC OUT, BALANCE ON/OFF), loosen the hex setscrew using a hex wrench through the access holes in the bottom side of sub-panel B.

EXPLODED VIEW

L-01A

A

B



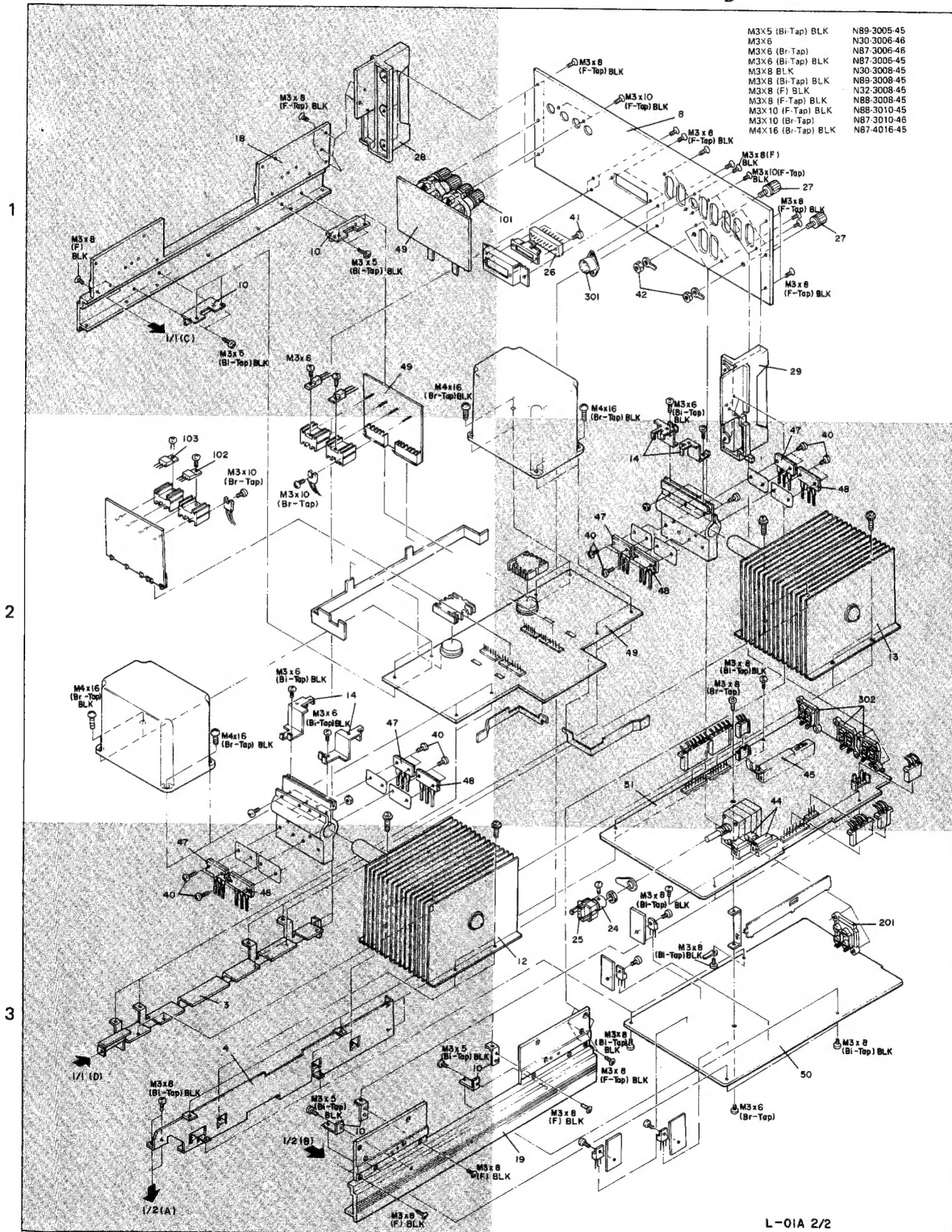
Refer to parts list on page 20 and 21.

EXPLODED VIEW

L-01A

C

D



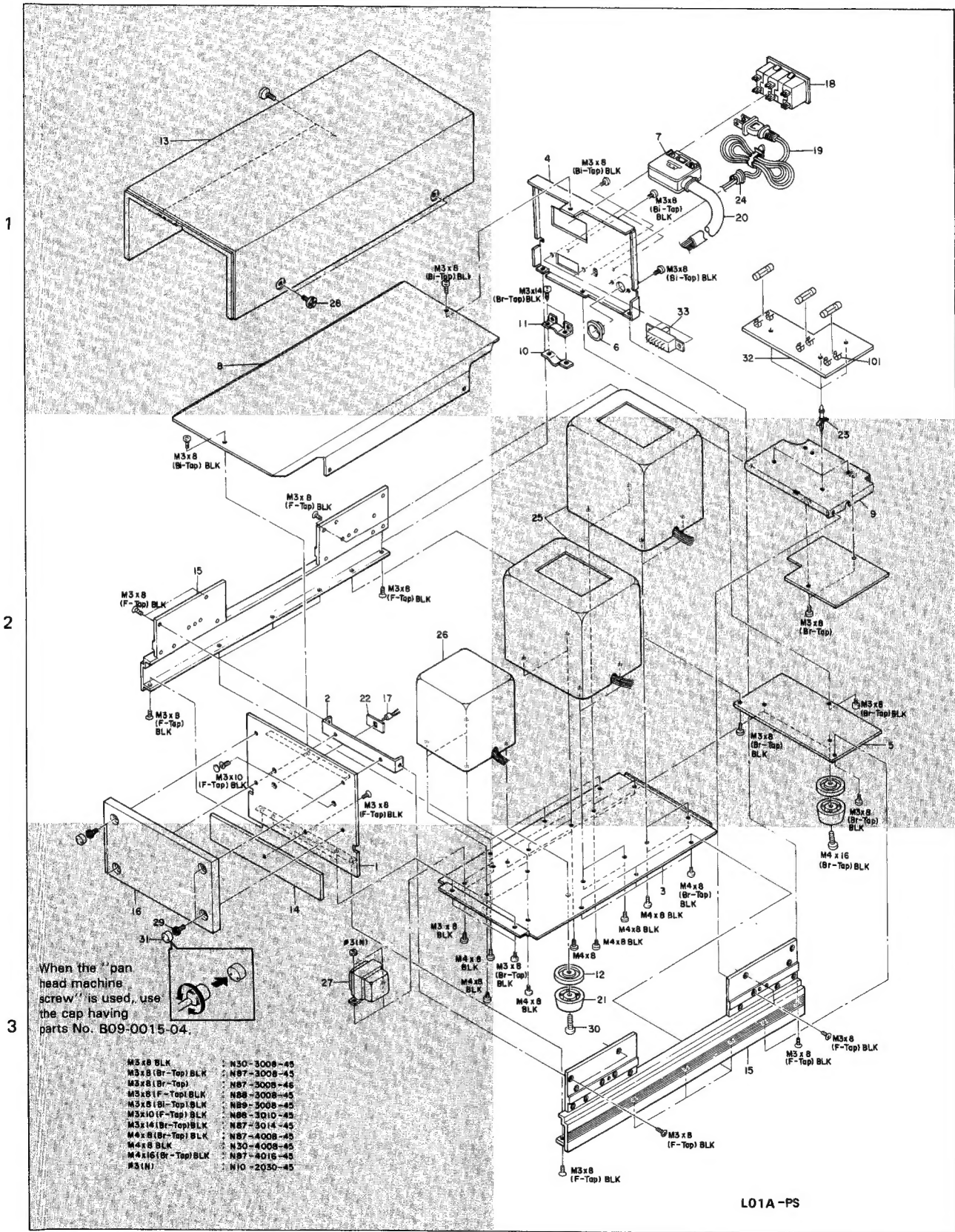
L-01A 2/2

Refer to parts list on page 20 and 21.

EXPLODED VIEW

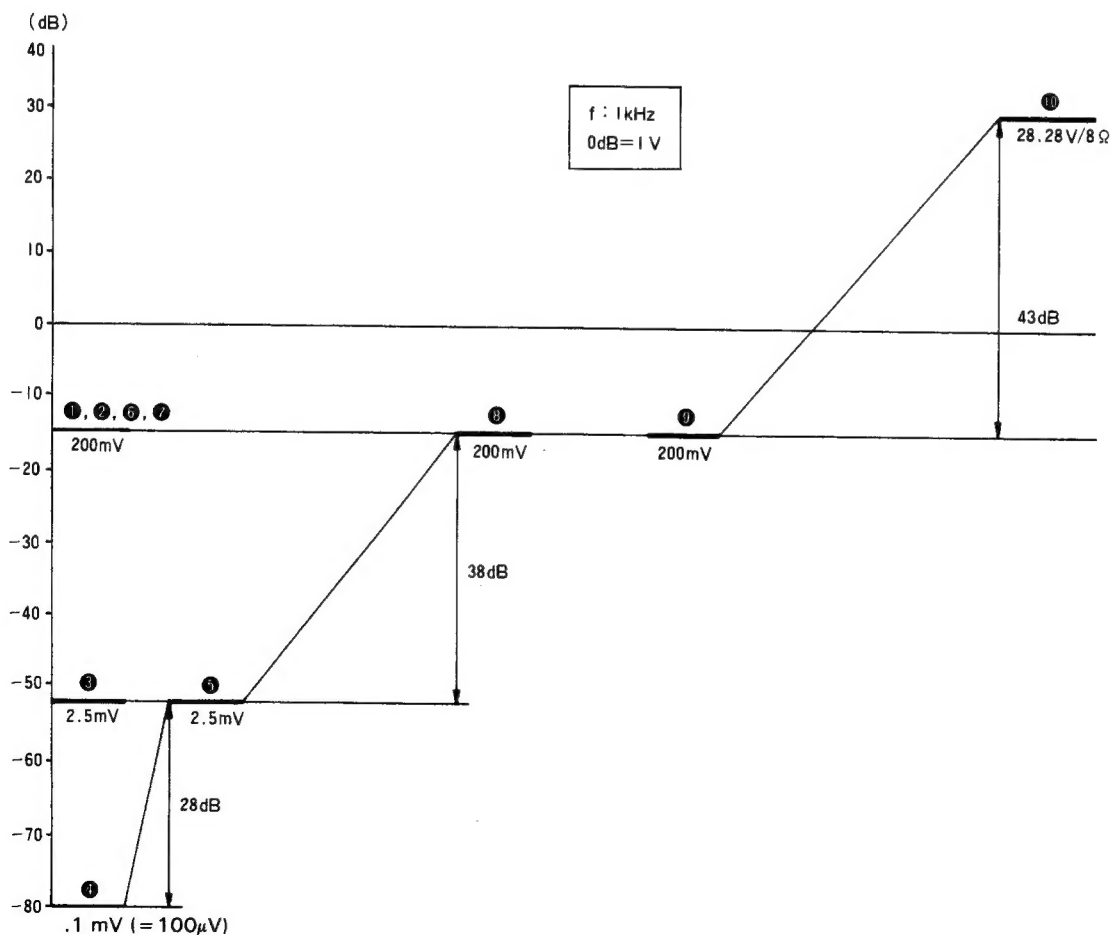
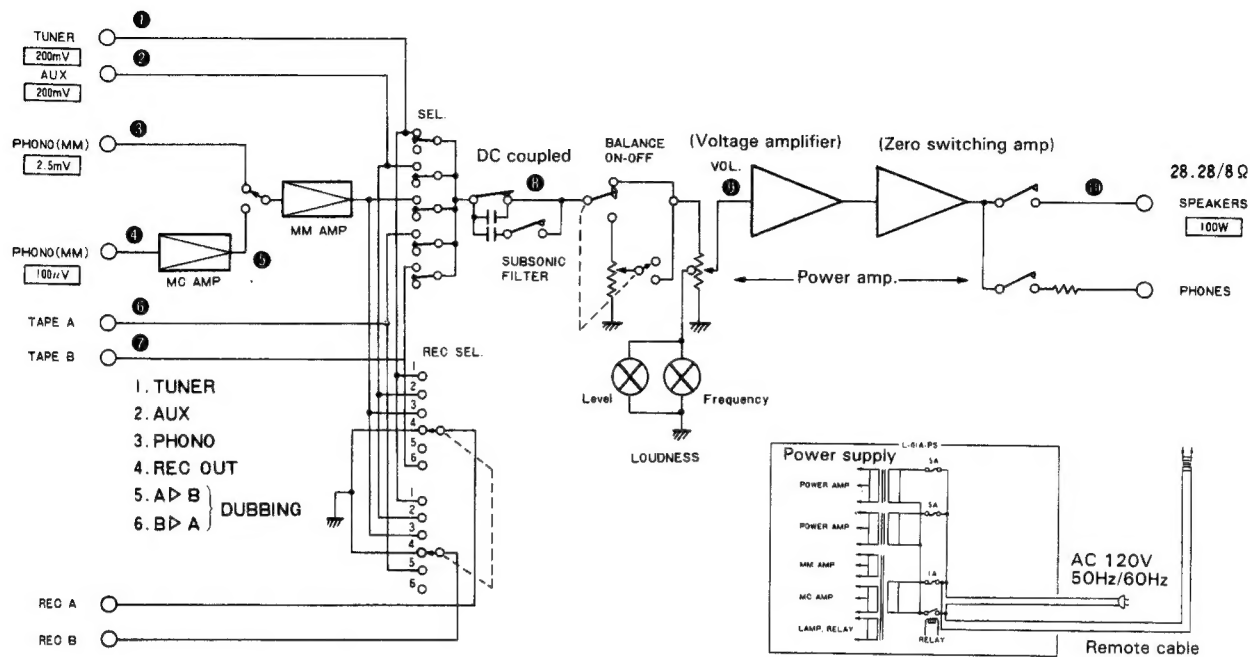
L-01A-POWER SUPPLY A

B



Refer to parts list on page 20 and 21.

BLOCK DIAGRAM



CIRCUIT DESCRIPTION

In the L-01A, an ASO protection circuit, a zero-switching circuit, a relay delay circuit and a shunt regulator in the preamplifier are employed. For explanation of circuit operation of the parallel input circuit, refer to the KHA-50 service manual. For explanation of circuit operation of the constant current circuit, differential amplifier and current mirror circuit, refer to the service manual of the L-07C and L-07M.

1. ASO Protection Circuit

When an excessive current flows through the power transistors, a voltage appears across the protection resistor, $0.1\ \Omega$ connected to the collectors of the power transistor Q1, Q3, Q5, Q7. When this occurs at the PNP transistors, a voltage is applied to the base of the ASO transistor Q1. Therefore, Q1 is turned ON, then a voltage is applied to the base of Q3, and Q3 is turned ON, so that the audio signal fed to Q7 is limited.

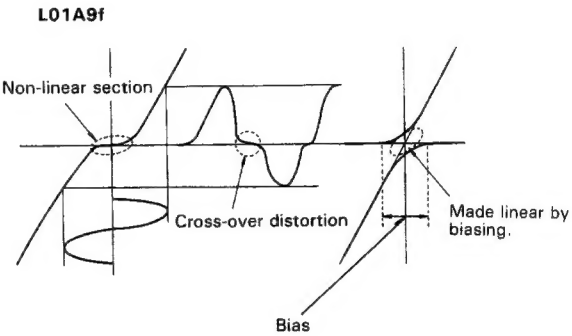
Since the base of Q15 is connected to the collector of Q3, the base voltage of Q15 drops when Q3 is ON. Therefore, Q15 is turned ON. Thus, a voltage (reference value: 1.8 V) is applied to Pin 3 (0 V detection terminal) of IC1, resulting in release of the protection relays RL2 and RL3.

When an excessive current flows through the NPN transistors, the voltage is applied to the base of Q5. When Q5 is ON, the audio signal fed to Q9 flows through Q5, so that the base current of Q9 decreases.

2. Zero-switching Circuit

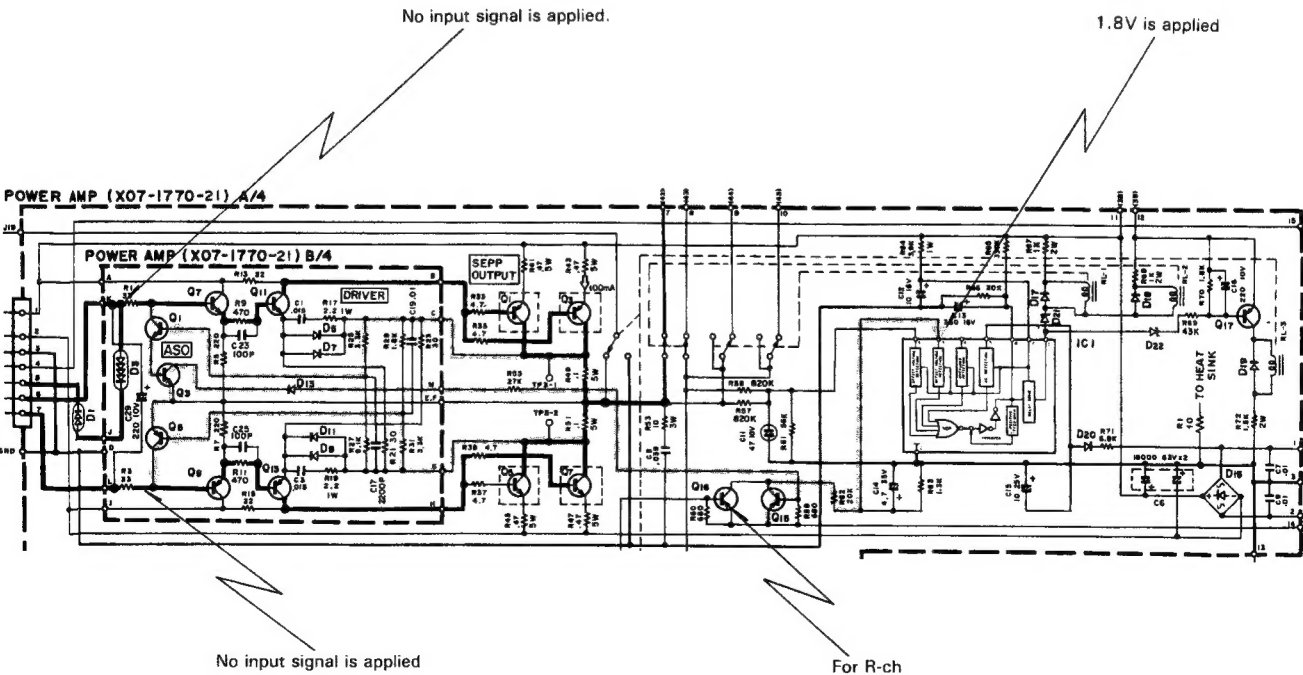
Ordinary power amplifiers are operated in class B because of its high efficiency. However, switching distortion and cross-over distortion are generated.

The cross-over distortion is generated because a class B push-pull amplifier uses the non-linear section of the input-output characteristic curve when input level is low.

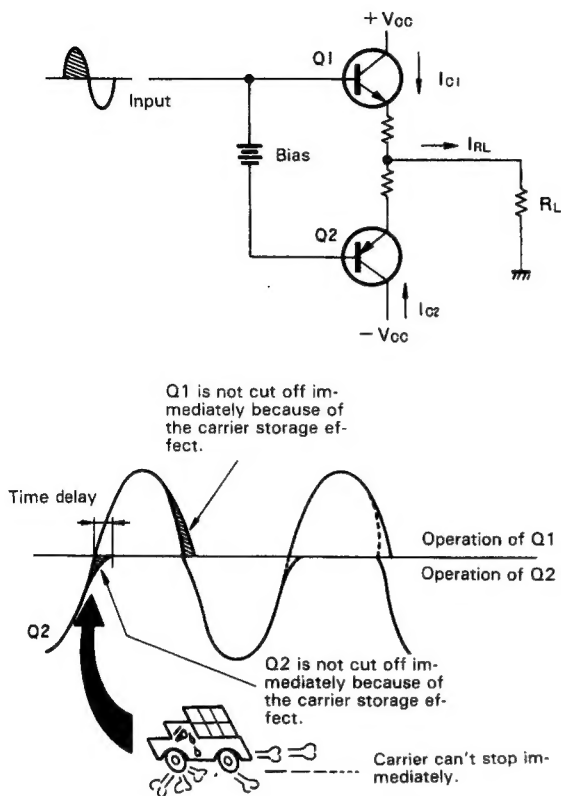


To reduce the cross-over distortion, the power transistors are appropriately biased so that the non-linear section is cancelled. Thus, the amplification is operated in close to class AB.

On the other hand, the switching distortion is generated because the switching ON/OFF timing of the SEPP transistors differs. The output stage of the power amplifier generally has SEPP connection.



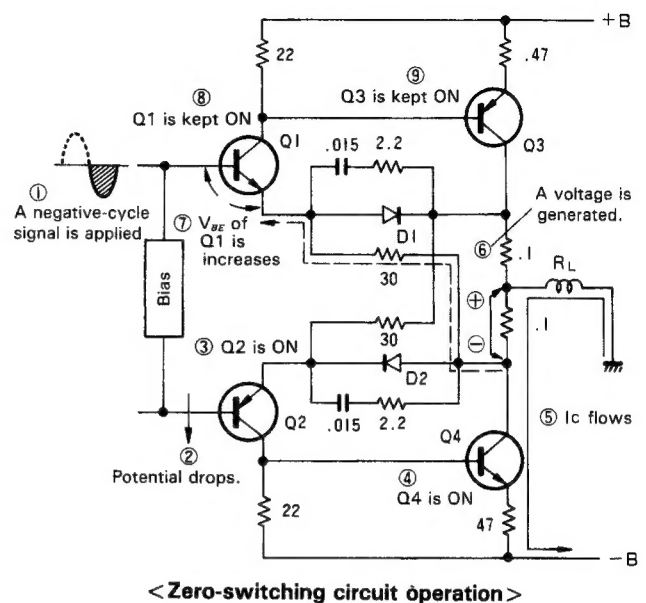
CIRCUIT DESCRIPTION



In the above figure, when such a sine wave signal is applied to the input, Q1 is ON and Q2 is OFF during the positive half period of the input signal, and during the negative half period Q1 is OFF and Q2 is ON. However, the output current is not switched smoothly when the input signal changes from positive to negative (or from negative to positive) because of the carrier storage effect.

When the input signal changes from negative to positive, Q1 is turned ON immediately but Q2 is not turned OFF because of the carrier storage effect. By the time Q2 is completely turned OFF, a fairly large current will already be flowing through Q1. This phenomena will be seen in the opposite transition.

To reduce distortion caused by the carrier storage effect, a certain amount of current is made to flow through the transistors even while they are nominally OFF. This type of amplifier is called the zero switching amplifier. The basic circuit of the output stage of the L-01A is shown in the following.



When a negative signal is applied to the input, Q2 and Q4 are deeply biased and the collector current of Q4 increases proportional to the input signal. At the same time, Q1 and Q3 will tend to go OFF. However, a voltage of $I_C \times R$ appears across the resistor 0.1Ω connected to the collector of Q4 and this voltage is applied to the emitter of Q1. Thus, V_{BE} of Q1 is increased and a small collector current flows through Q1. Therefore, a small current also flows through Q3. That is, Q1 and Q3 are maintained in the ON state when they would, if the circuit was of the conventional type, be OFF.

3. Relay Delay Circuit

This circuit prevents shock noise to be emitted when either MC or MM cartridge input is selected as well as when phono input is selected.

When the MC/MM switch is switched over, the MC/MM switching relay keeps the preceding condition for some time and the PHONO ON/OFF relay is kept OFF for a certain time.

PREAMP OFFSET VOLTAGE ADJUSTMENT

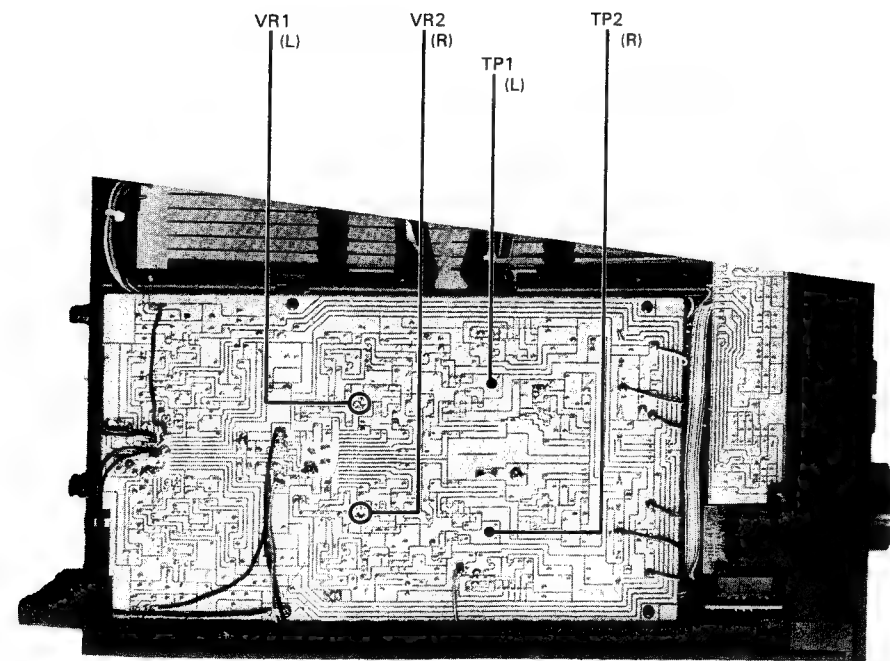
1. Disconnect the phono cord from the phono jacks.
2. Connect a DC voltmeter between the test point 1 and GND (2 and GND) of the Preamp (X08-1750-10).
3. Adjusting the trimming pot. VR1 (VR2), for 0V reading of the DC voltmeter.

POWER AMP OFFSET VOLTAGE ADJUSTMENT

1. Connect the DC voltmeter between the \oplus and \ominus speaker terminals. (TP5, 6)
2. Adjust the trimming pot VR1 (VR2) for a 0V reading of the DC voltmeter.

POWER AMP BIAS CURRENT ADJUSTMENT

1. Turn the volume control knob fully counterclockwise.
2. Connect the DC voltmeter between the collector of Q1 and of Q5. (TP3, 4)
3. Adjust the trimming pot. VR3 (VR4), of audio (X09-1380-10) for 20 mV reading of the voltmeter.



< PREAMP OFFSET ADJUSTMENT >

RÉGLAGE DE LA TENSION DE DÉCALAGE (OFFSET) EN SECTION PREAMPLI

1. Débrancher les câbles PHONO des prises jacks.
2. Brancher le voltmètre c.c. aux points d'alignement. 1 et GND (2 et GND), sur la plaque du circuit imprimé du préampli (X08-1750-10).
3. Régler le potentiomètre ajustable VR1 (VR2) de façon à ce que le voltmètre à C.C. indique 0V.

RÉGLAGE DE LA TENSION DE DÉCALAGE (OFFSET) EN SECTION AMPLI

1. Brancher le voltmètre à C.C. aux bornes de sortie \oplus et \ominus (TP5, 6).
2. Régler le potentiomètre ajustable VR1 (VR2) pour que la tension de sortie soit nulle.

RÉGLAGE DU COURANT DE POLARISATION

1. Tourner le bouton du commande de volume à fond dans le sens inverse de celui des aiguilles d'une montre.
2. Brancher le voltmètre à C.C. sur le collecteur de Q1 et Q5. (TP3, 4)
3. Régler le potentiomètre ajustable VR3 (VR4) de façon à ce que le voltmètre à C.C. indique 18 mV, sur la plaque du circuit imprimé de l'ampli. de puissance.

OFFSET-SPANNUNG DES VORVERSTÄRKERS

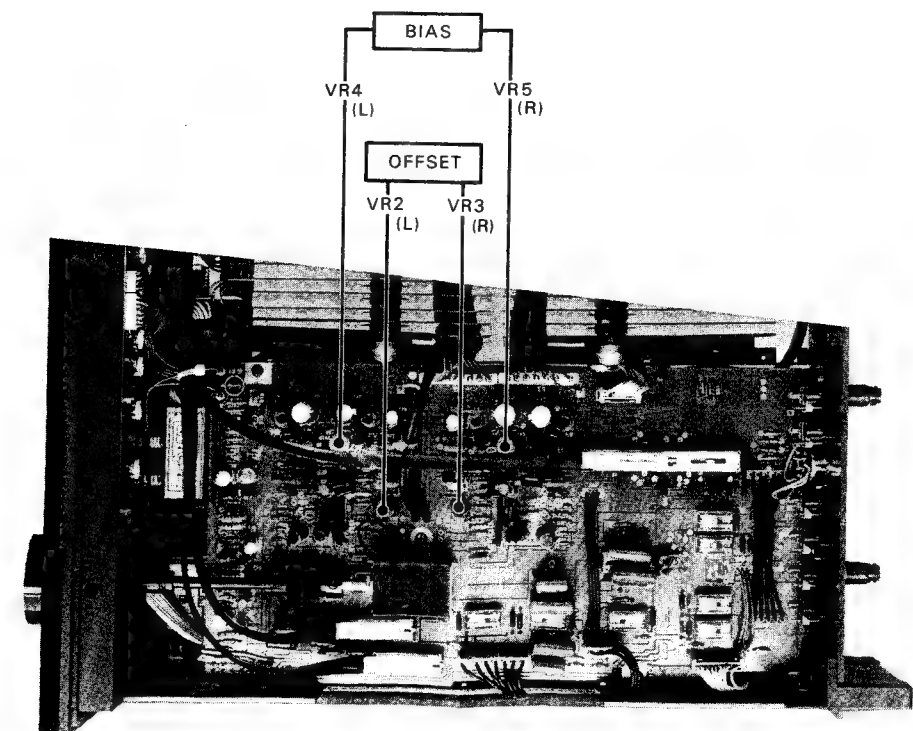
1. Die PHONO-Schnur aus den Buchsen PHONO MM oder den Buchsen PHONO MC.
2. Den Gleichspannungsmesser zwischen dem Regulierungspunkt 1 und der Erde (2 und der Erde) des Vorverstärkers (X08-1750-10) anschließen.
3. Den halbeingebetteten Widerstand VR1 (VR2) so regulieren, daß die Gleichspannungsmesser-Ablesung 0V ist.

OFFSET-SPANNUNG DES ENDVERSTÄRKERS

1. Den Gleichspannungsmesser zwischen der Regulierungspunkt \oplus und \ominus des Endverstärkers anschließen. (TP5, 6)
2. Den halbeingebetteten Widerstand VR (VR2) so regulieren, daß die Gleichspannungsmesser-Ablesung 0V ist.

LEERLAUFS

1. Den Lautstärkeregler (VOLUME) drehen um die Endstärker-Aufnahme auf Null zu reduzieren.
2. Den Gleichspannungsmesser zwischen der Emitter Elektrode von Q1 und der Elektrode von Q5. (TP3, 4)
3. Den halbeingebetteten Widerstand VR3 (VR4) so regulieren, daß die Gleichspannungsmesser-Ablesung 18 mV ist.

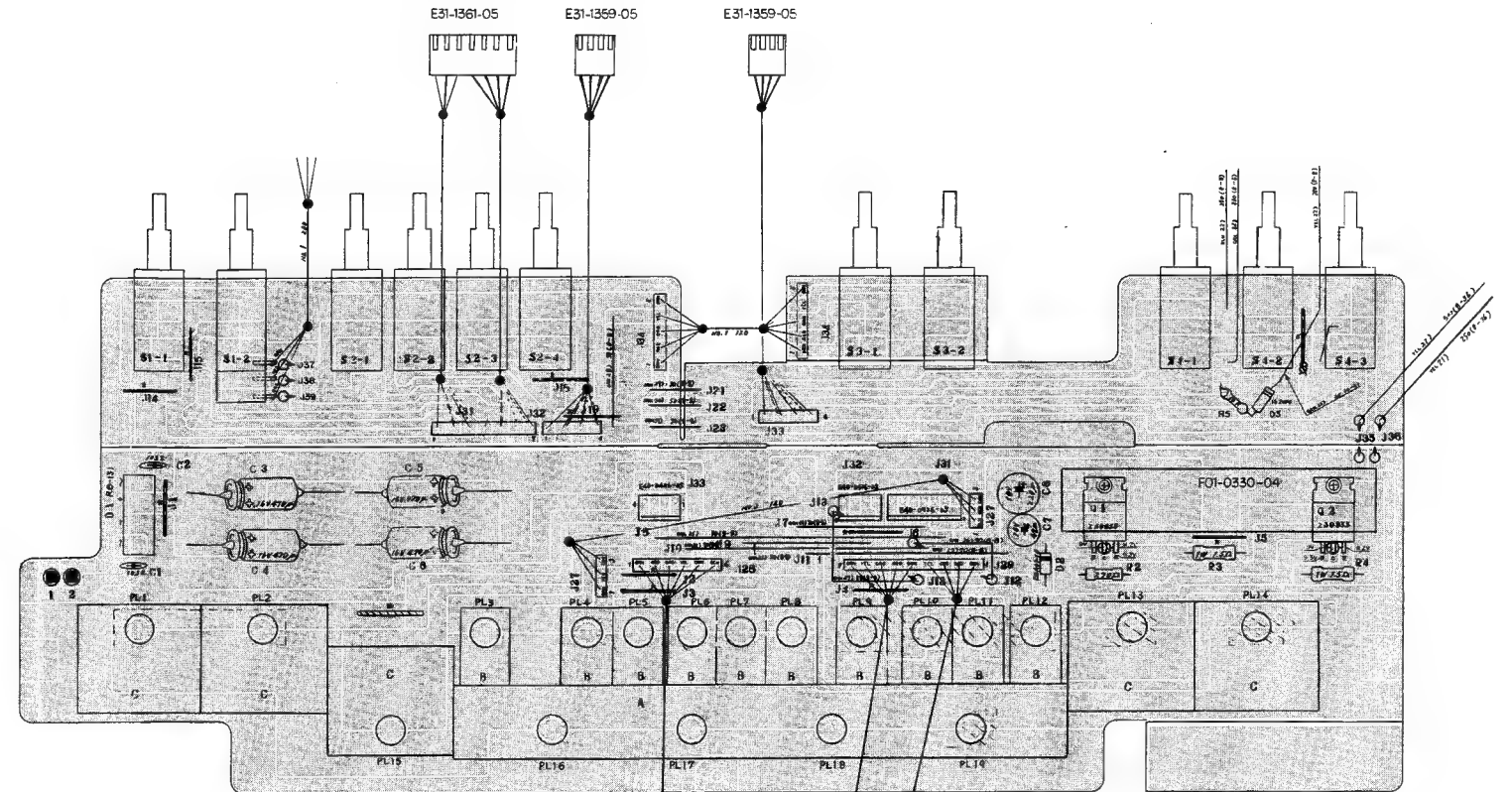
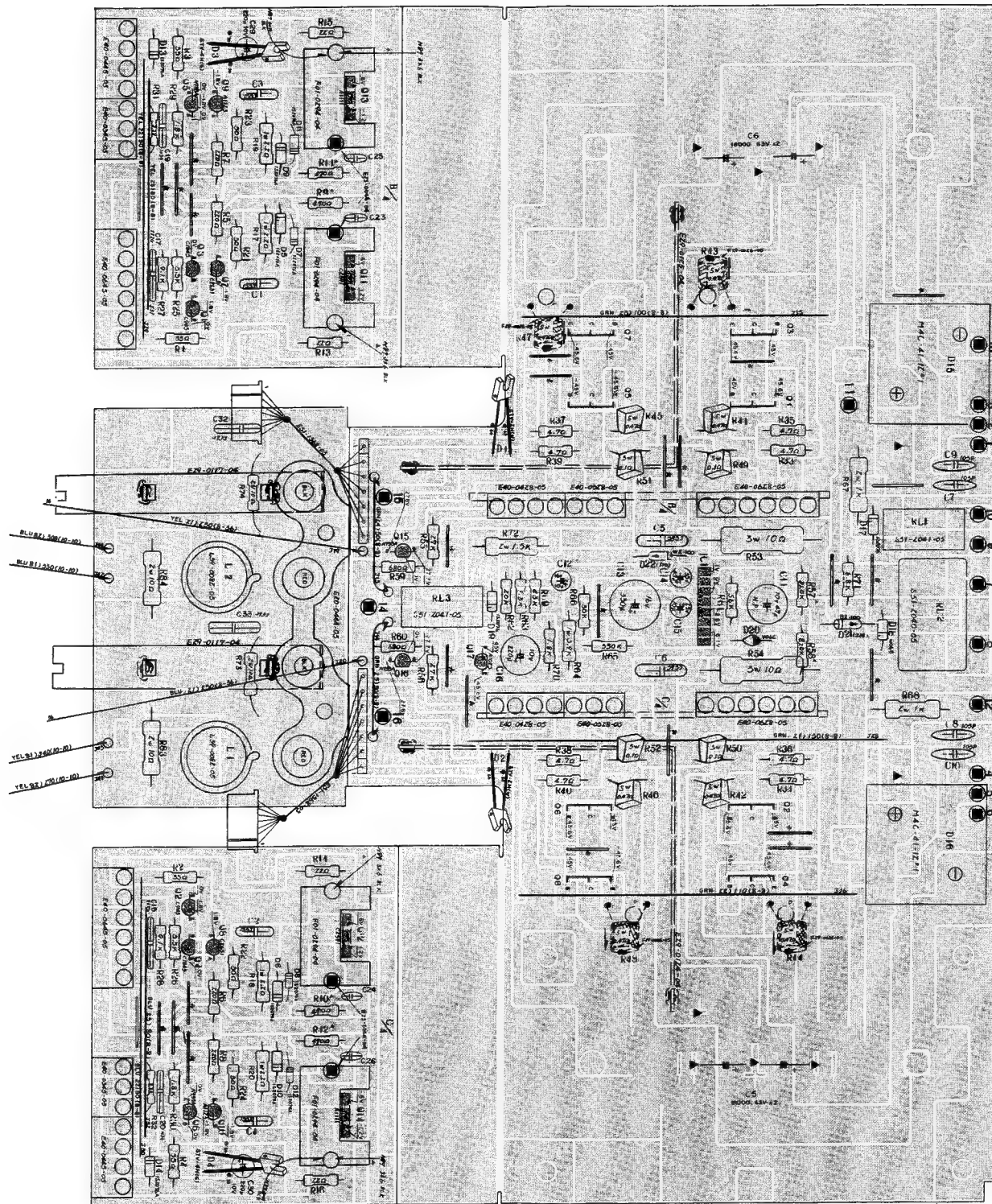


< POWER AMP OFFSET AND BIAS CURRENT ADJUSTMENT >

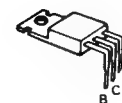
PC BOARD

▼POWER AMP (X07-1770-21) (Components side view)

▼SWITCH (X13-2650-21) (Components side view)



2SD855

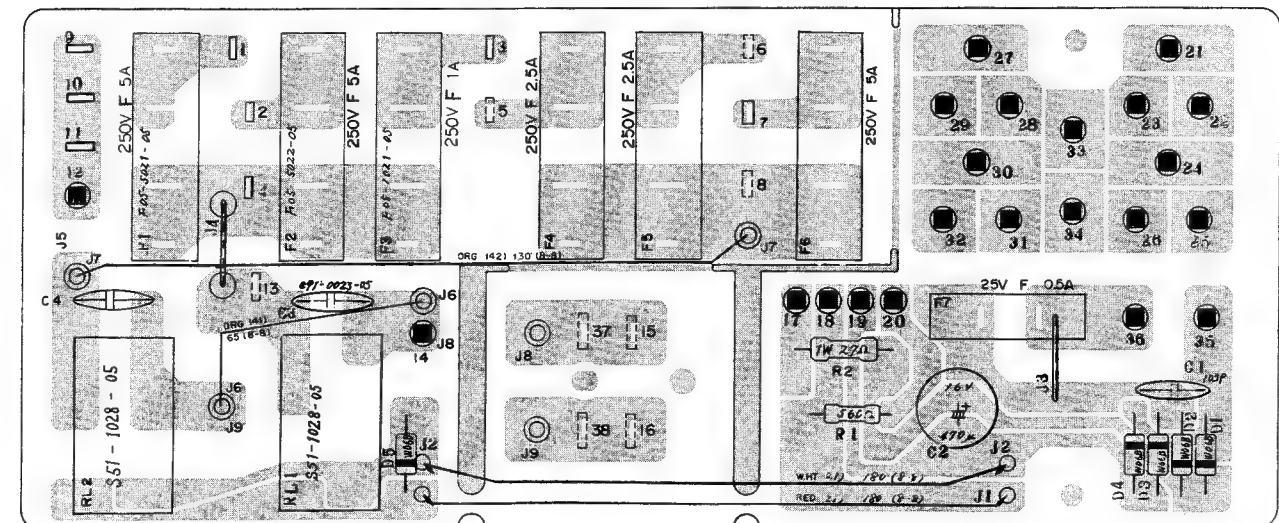


E31-1360-05

E31-1362-05

Q1,2: 2SD855(BD)
D1: RB-151
D2: EQA01-10(S1)

▼POWER SUPPLY (X00-2080-11) (Components side view)



2SA733 2SC945
2SA1023 2SC1845
2SA1123 2SC2631

2SA1111
2SC2591

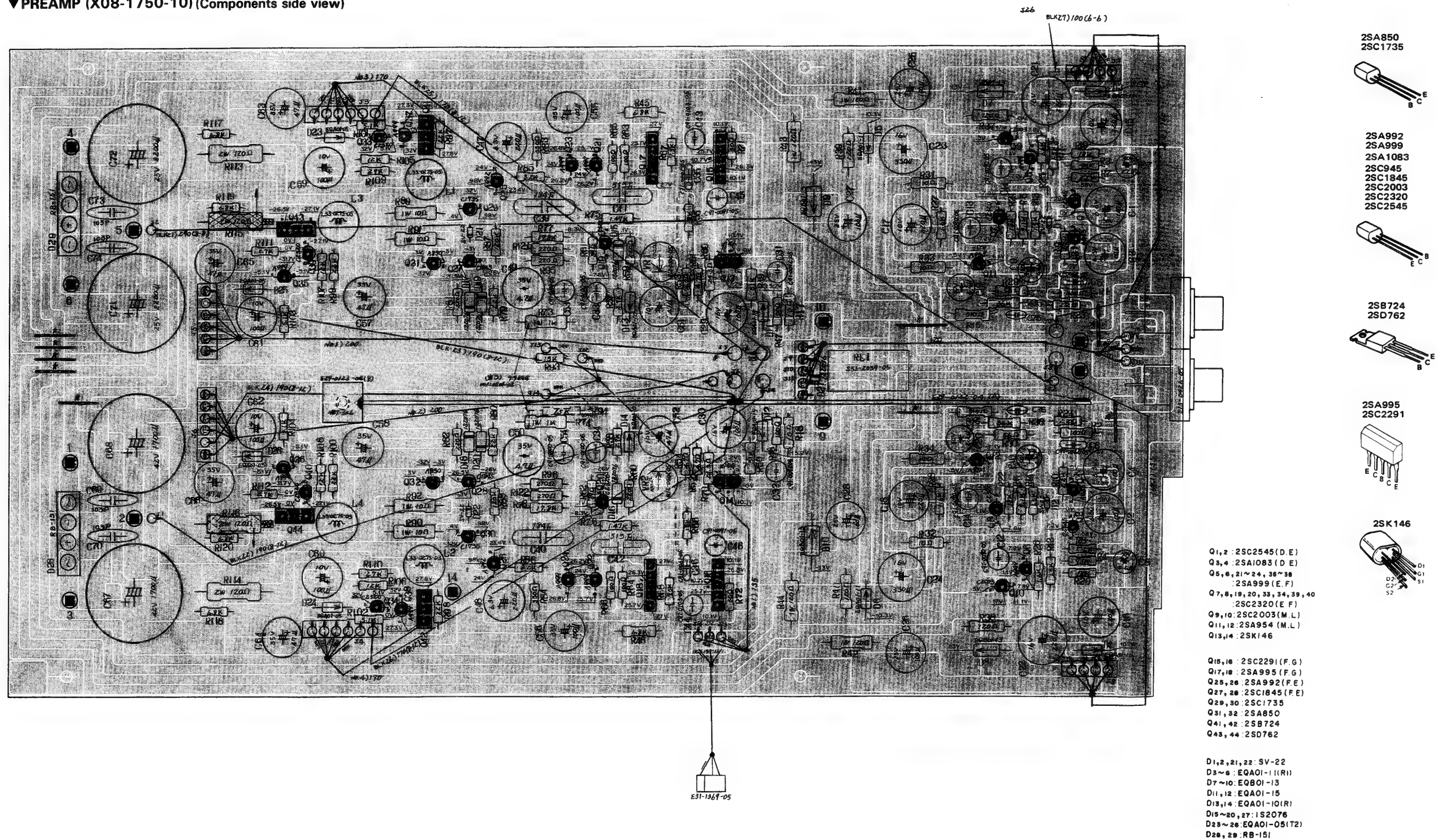
HA12002

Q1,2: 2SC945
Q3,4: 2SC1845
Q5,6,15,16: 2SA733A
Q7,8: 2SC2631(Q.R.S.)
Q9,10: 2SA1123(Q.R.S.)
Q11,12: 2SC2591(Q.R.)
Q13,14: 2SA1111(Q.R.)
Q17: 2SA1023
IC1: HA12002

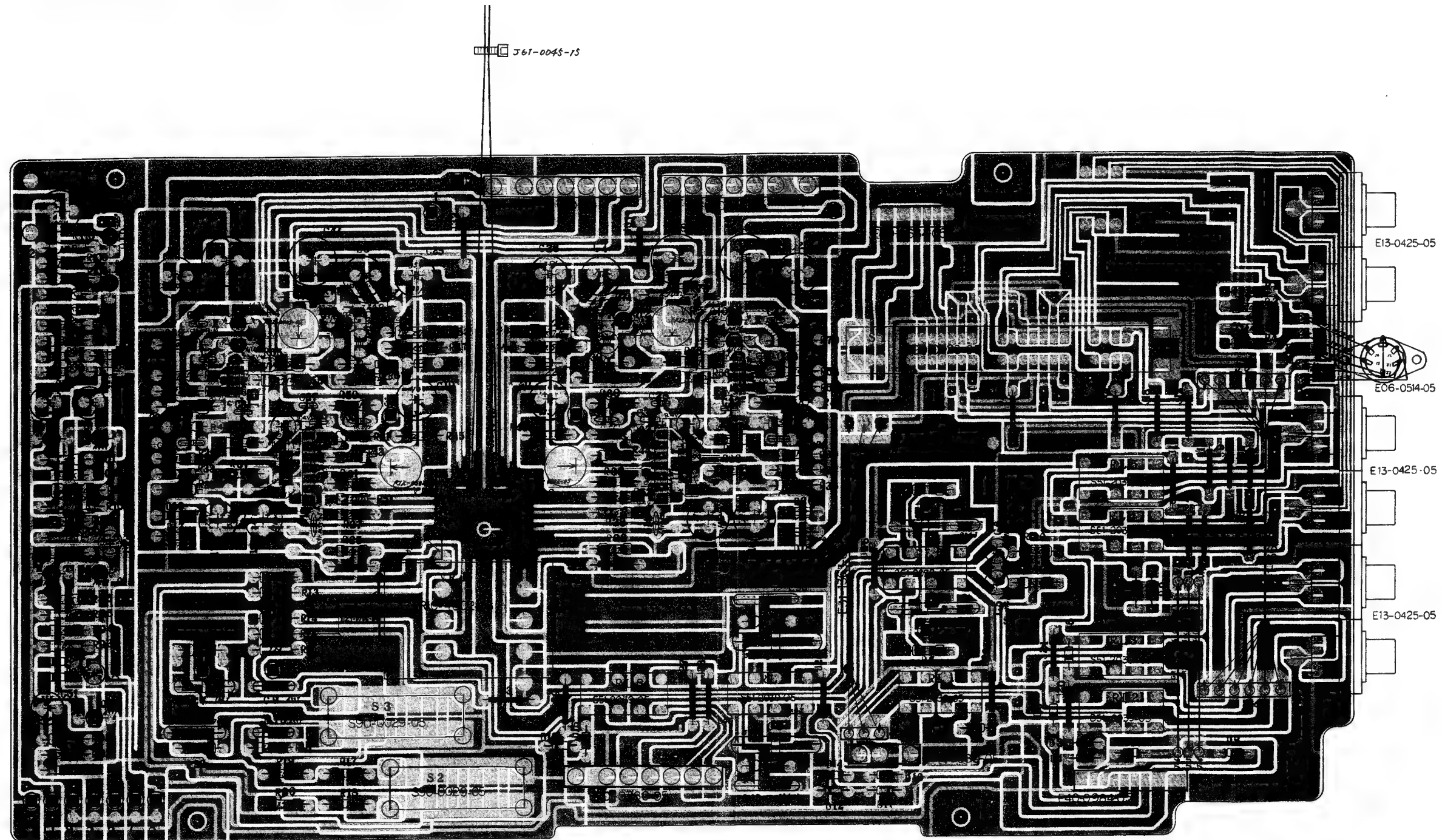
D1,2: STV-2H(W)
D3,4: STV-4H(G)
D5-14: IS2076A
D15,16: M4C-41-12 *1
D17,19: IS2076
D18: W06B
D20: V06C
D21: BZ-100
D22: WZ-100

PC BOARD

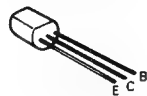
▼PREAMP (X08-1750-10) (Components side view)



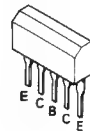
▼AUDIO (X09-1380-10) (Components side view)



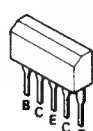
2SA1124
2SA999
2SC2632
2SC2320



2SC2291



2SC2259



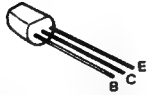
μPA68H



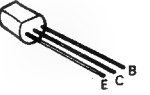
Q1,2:2SC2291(G,H)
Q3,4:μPA68H(L,M)
Q5,6:2SC2259(G,H)
Q7-10:2SA1124(R,S)
Q11,12:2SC2632(R,S)
Q13-17:2SA999(E,F)
Q18,19:2SC2320(E,F)

D1,3-16,29-37:1S2076
D17,18:WZ-240
D19,20:WZ-197
D21,22:XZ-051

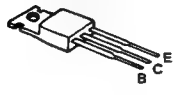
2SA850
2SC1735



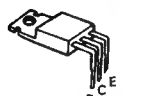
2SA733 2SC945
2SA954 2SC1845
2SA992 2SC2003
2SA999 2SC2320
2SA1023 2SC2545
2SA1083 2SC2631
2SA1123 2SC2632
2SA1124



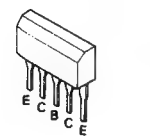
2SA1111
2SB724
2SC2591
2SD762



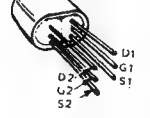
2SD855



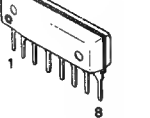
2SA995
2SC2291



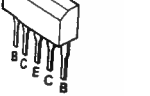
2SK146



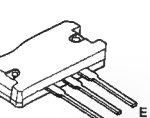
HA12002



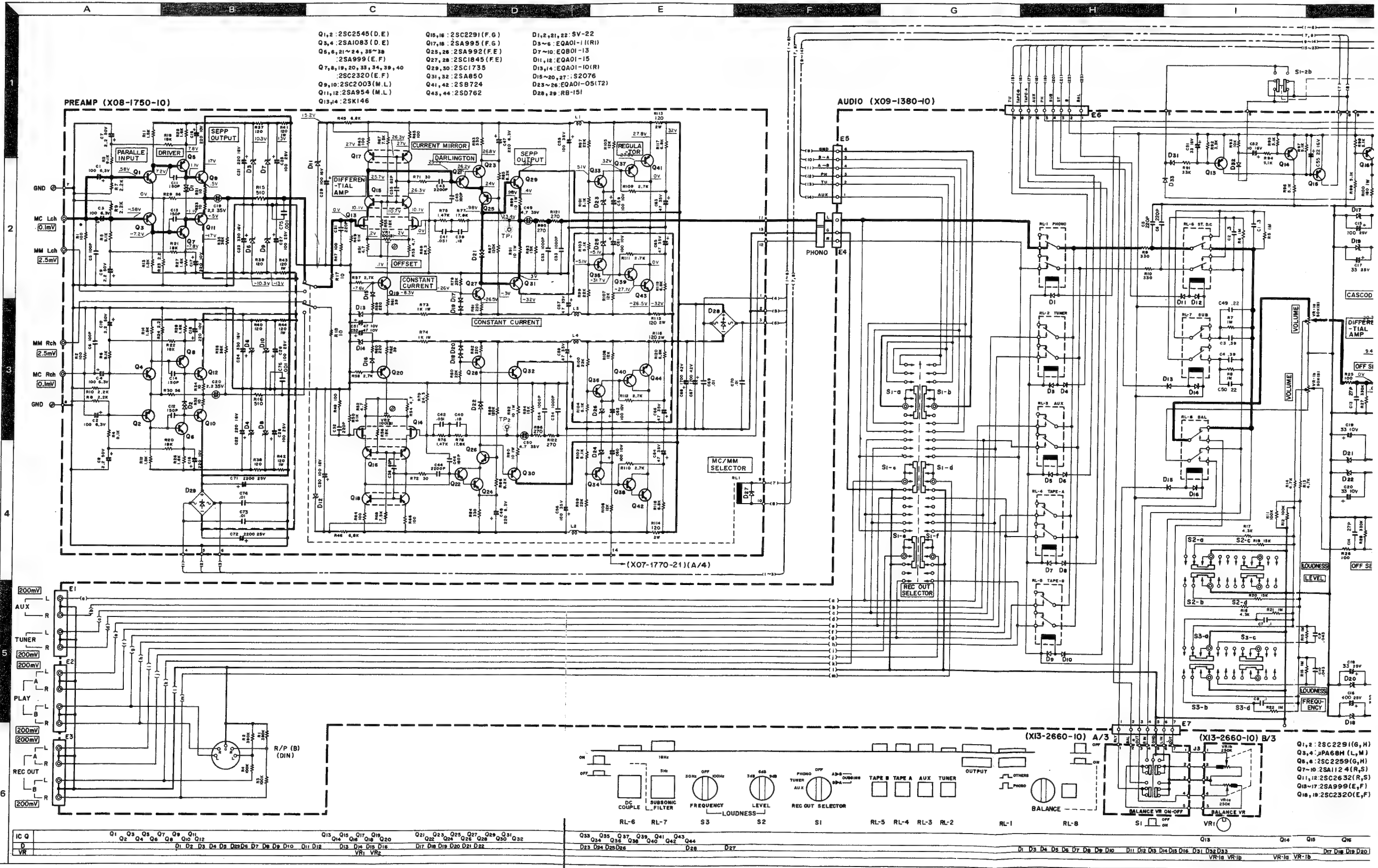
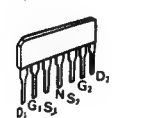
2SC2259



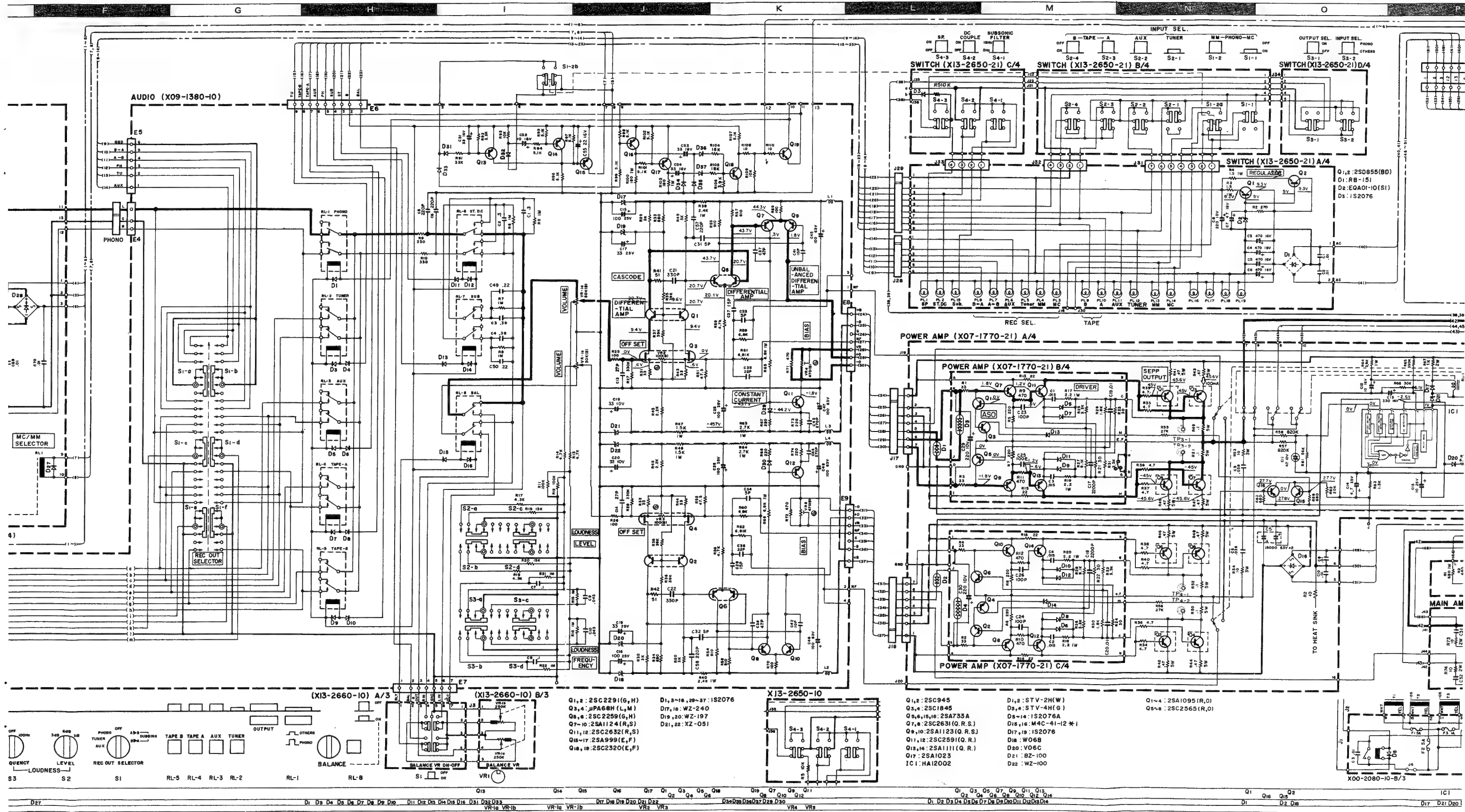
2SA1095
2SC2565

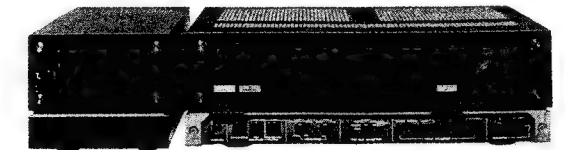
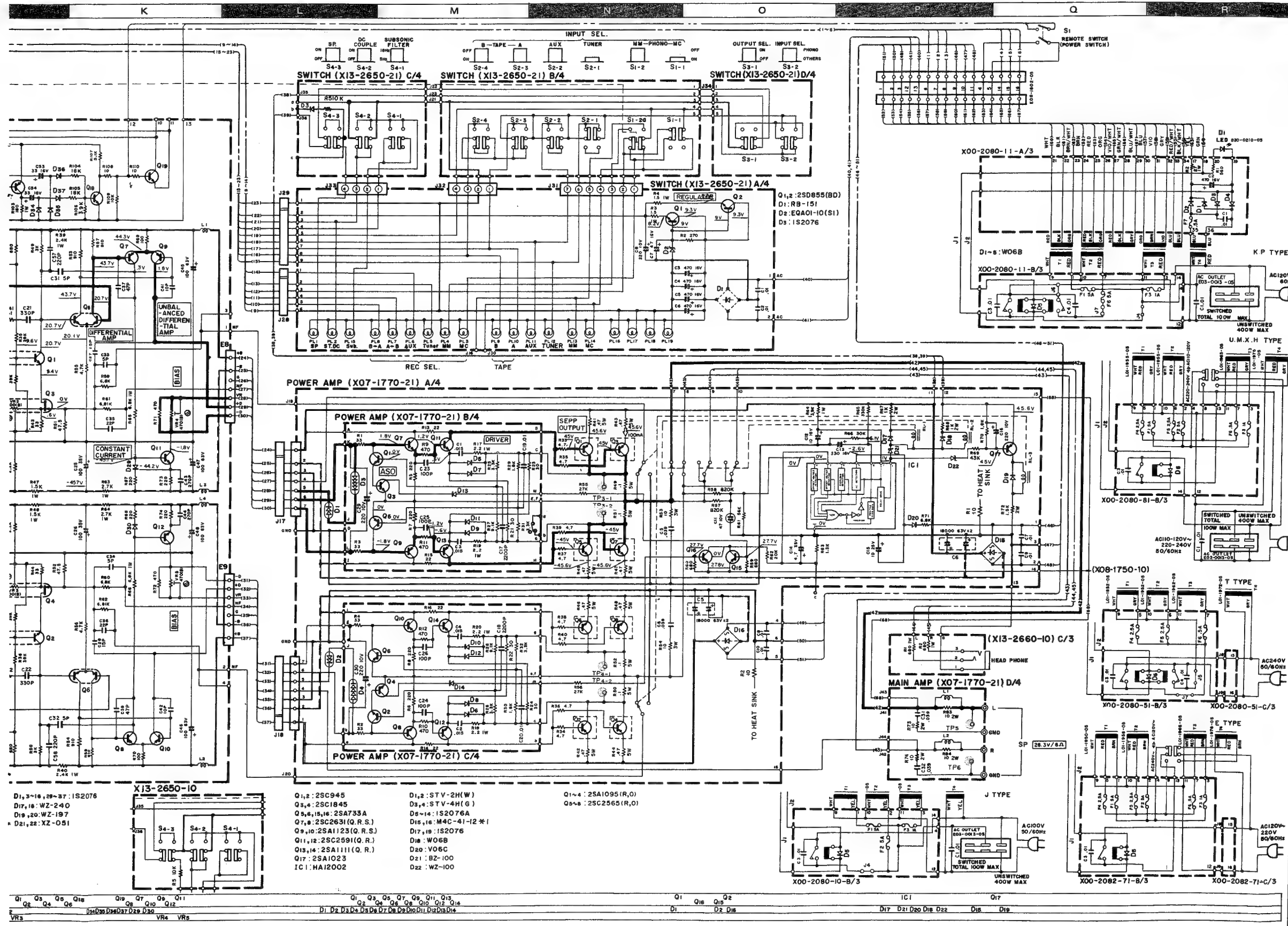


μPA68H



NEW SEPARATE AMPLIFIER





SPECIFICATIONS

POWER OUTPUT

110 watts* per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.006% total harmonic distortion.

Both Channels Driven..... 120+120 watts 8 ohms at 1,000 Hz
170+170 watts 4 ohms at 1,000 Hz

Total Harmonic Distortion

(20 Hz to 20,000 Hz)
AUX input to SPEAKER output..... 0.006% at rated power into 8 ohms
0.006% at 1/2 rated power into 8 ohms

PHONO input to SPEAKER output..... 0.008% at rated power with VOLUME -20 dB
Intermodulation Distortion..... 0.003% at rated power into 8 ohms
(60 Hz: 7 kHz = 4:1)

Damping Factor..... 1000, 1,000 Hz into 8 ohms

Transient Response

Rise Time..... 0.7 μs

Slew Rate..... ±150 V/μs

Power Bandwidth..... 5 Hz to 100 kHz at 0.03% THD

Frequency Response (DC COUPLED at ON)..... DC to 400 kHz, -3 dB
(DC COUPLED at OFF)..... 5 Hz to 18 Hz to 400 kHz, -3 dB

Speaker Impedance..... Accepts 4 ohms to 16 ohms

Input Sensitivity/Impedance

Phono (MM)..... 2.5 mV/50 kohms

Phono (MC)..... 0.1 mV/100 kohms

Tuner, Aux, Tape Play..... 200 mV/50 kohms

Signal to Noise Ratio (IHF, A).....

Phono (MM)..... 90 dB for 2.5 mV input

96 dB for 5.0 mV input

102 dB for 10 mV input

72 dB for 0.1 mV input

112 dB for 200 mV input

Maximum Input Level for Phono (MM)..... 250 mV (RMS), THD 0.01% at 1,000 Hz

(20 Hz to 20,000 Hz)

Subsonic Filter (DC COUPLED at OFF)..... 6 dB/Oct at 5 Hz and 18 Hz

Output Level/Impedance

Tape REC (Pin)..... 200 mV/180 kohms

(DIN)..... 40 mV/80 kohms

Frequency Response for Phono..... RIAA standard curve ±0.2 dB

Loudness Control..... +3 dB, +6 dB, +9 dB at 30 Hz and 100 Hz

(at -30 dB VOLUME Level)

Subsonic Filter (DC COUPLED at OFF)..... 6 dB/Oct at 5 Hz and 18 Hz

GENERAL

Power Consumption..... 5.5A UL/CSA

430 watts, Rated power at 8 ohms

115 watts, Non signal

AC Outlet..... Switched 2, Unswitched 1

Dimensions..... Amplifier (L-01A) Power Supply (L-01A-PS)

W 440 mm (17-5/16") W 170 mm (6-11/16")

H 156 mm (6-5/32") H 156 mm (6-5/32")

D 452 mm (17-25/32") D 403.5 mm (15-7/8")

Net Weight..... 9.5 kg (20.9 lb) 17.5 kg (38.5 lb)

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Kenwood strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

DC voltages are measured by a VOM with 20 kΩ/V input impedance.

PARTS LIST

PARTS LIST

INSTRUCTION FOR PARTS LIST

Ref. No.	Parts No.	Description	Re- marks
参照番号	部品番号	部品名/規格	備考
②	14 3A	A20-1391-13 FRONT PANEL ASSY	③
①	14 3A	A20-1417-13 FRONT PANEL ASSY	③
	15 3A	A21-0302-03 DRESSING PANEL	③
	15 3A	A21-0302-03 DRESSING PANEL	③
	15 3A	A21-0302-03 DRESSING PANEL	③
⑤	C1 C2	C54-3310-39 CERAMIC 0.01UF P	ET
	C1	C90-0145-05 POLYESTER 0.01UF AC125V	I
	C1	C91-0023-05 CERAMIC 0.01UF AC250V	UM
	C1	C91-0023-05 CERAMIC 0.01UF AC250V	HX
	C1	C91-0025-05 CERAMIC 0.01UF AC125V	P

- ① Exploded view drawing No.
② Position in exploded view.
③ Symbol of new parts
④ Area to which parts are shipped. Example: A20-1390-13 is the part No. of FRONT PANEL ASS'Y for the "K" type products (for U.S.A.). When this column is blank, it means that the same type of parts (same parts No.) are used for the products shipped to all areas.
⑤ Reference No. in schematic diagram.
⑥ Abbreviation of "ceramic capacitor"
- All capacitors and resistors are listed using abbreviations.
Abbreviations
* Abbreviations of capacitors (Parts No. with initial letter "C").
ELECTRO Electrolytic capacitor
LL-ELEC Low leak electrolytic capacitor
NP-ELEC Non-pole electrolytic capacitor
MICA Mica capacitor
POLYSTY Polystyrene capacitor
MYLAR Mylar capacitor
CERAMIC Ceramic capacitor
TANTAL Tantalum capacitor
MF Metallized film capacitor
MP Metallized paper capacitor
OIL Oil capacitor
The unit "UF" is used in lieu of "μF".
* Abbreviations of resistors (Parts No. with initial letters "R").
RC Carbon composition resistor
RD Carbon film resistor
FL-PROOF RD Flame-proof carbon film resistor
RW Wire wound power resistor
FL-PROOF RS Flame-proof metal oxide film resistor
RN Metal film resistor
FUSE-RESIST Resistor with fuse function
2B Rated wattage 1/8W
2E Rated wattage 1/4W
2H Rated wattage 1/2W
3A Rated wattage 1W
3D Rated wattage 2W
3F Rated wattage 3W
3G Rated wattage 4W
3H Rated wattage 5W
All resistor values are indicated with the unit (Ω) omitted.
* Abbreviations common to capacitors and resistors.
C ±0.25pF (Used for capacitors only)
D ±0.5pF (Used for capacitors only)
F ±1%
G ±2%
J ±5%
K ±10%
M ±20%
Z +80%, -20% (Used for capacitors only)
P +100%, -0% (Used for capacitors only)
Resistors RD (carbon composition resistors) are not listed in the parts list. For values, refer to the schematic diagram.

Ref. No.	Parts No.	Description	Re- marks
参照番号	部品番号	部品名/規格	備考
L-01A AMPLIFIER UNIT			
1 1A	-	MESH PLATE (A)	
2 1B	-	MESH PLATE (B)	
3 3C	-	METALLIC FRAME (L)	
4 3C	-	METALLIC FRAME (R)	
5 2A	-	ESCUTCHEON	
6 2A	-	SUB PANEL (A)	
7 2B	-	SUB PANEL (B)	
8 1D	-	REAR PANEL	
9 2B	-	BOTTOM PLATE	
10 1C, 3C	-	L SHAPED HARDWARE	
11 2B	-	MESH PLATE	
14 2C, 2D	-	MOUNTING HARDWARE	
15 1B	A03-0248-01	WOODEN CABINET	*K
15 1B	A03-0251-01	WOODEN CABINET	PU
15 1B	A03-0251-01	WOODEN CABINET	MX
15 1B	A03-0251-01	WOODEN CABINET	TE
16 3A	A20-1551-03	FRONT PANEL	*K
16 3A	A20-1551-03	FRONT PANEL	PU
16 3A	A20-1551-03	FRONT PANEL	MX
16 3A	A20-1552-03	FRONT PANEL	E
17 2A	A21-0314-02	DRESSING PANEL	T
18 1C	A50-0074-02	SIDE PLATE (L)	*
19 3D	A50-0075-02	SIDE PLATE (R)	*
-	B46-0055-20	WARRANTY CARD	P
-	B46-0060-00	WARRANTY CARD	T
-	B46-0061-20	WARRANTY CARD	K
-	B46-0062-20	WARRANTY CARD	U
-	B46-0063-13	WARRANTY CARD	U
-	B46-0064-10	WARRANTY CARD	X
-	B50-3067-00	INSTRUCTION MANUAL	*K
-	B50-3067-00	INSTRUCTION MANUAL	U
-	B50-3068-00	INSTRUCTION MANUAL	PM
-	B50-3068-00	INSTRUCTION MANUAL	X
-	B50-3069-00	INSTRUCTION MANUAL	T
-	B50-3082-00	INSTRUCTION MANUAL	E
-	B59-0018-00	SERVICE STATIONS' LIST	U
20 3B	B07-0249-04	ESCUTCHEON	*
21 2A	B08-0010-04	INDICATOR	*
22 3A	B10-0266-03	FRONT GLASS	*
43 3A	B09-0015-04	CAP	*
C5 ,6	C90-0419-15	ELECTRO 18000UFX2 63WV	*
23 2B	D21-0455-05	SHAFT	*
24 2B, 3D	D22-0036-04	COUPLING (A)	*
25 3D	D22-0037-04	COUPLING (B)	*
-	E14-0107-05	PHONO PLUG	*
-	E09-1603-05	RECTANGULAR PLUG 16P	*
27 1D	E21-0011-05	GND TERMINAL	*
12 3D	F01-0331-15	HEAT SINK ASSY (L)	*
13 2D	F01-0332-15	HEAT SINK ASSY (R)	*
28 1C	G13-0122-05	CUSHION (L)	*
29 1D	G13-0123-05	CUSHION (R)	*
-	H01-3099-14	CARTON BOX	*T
-	H01-3102-14	CARTON BOX	E
-	H01-3150-04	CARTON BOX	KP
-	H01-3150-04	CARTON BOX	UM
-	H01-3150-04	CARTON BOX	X

Ref. No.	Parts No.	Description	Re- marks
参照番号	部品番号	部品名/規格	備考
-	H12-0073-03	PACKING FIXTURE	*
-	H12-0074-04	PACKING FIXTURE	*
-	H12-0075-04	PACKING FIXTURE	*
-	H20-0458-04	COVER	KP
-	H20-0458-04	COVER	UX
-	H20-0458-04	COVER	TE
-	H20-0459-04	COVER	M
-	H25-0029-04	BAG	*
-	H25-0078-04	BAG	*
-	H40-0004-04	ANTI-RUST PAPER	*
30 3B	J02-0098-04	FOOT	*
31 3A	K21-0381-04	KNOB (VOLUME)	*
32 2B	K21-0382-04	KNOB (LOUD, REC, BALANCE)	*
33 2B	K27-0114-03	KNOB (OUTPUT, INPUT)	*
34 2B	K27-0115-03	KNOB (POWER)	*
35 2A, 2B	K27-0116-04	KNOB (PUSHBUTTON) X5	*
36 2B	K27-0117-04	KNOB (SELECTOR, BALANCE)	*
37 1B	N09-0323-04	SCREW	*
38 3A	N09-0324-04	SCREW	*
38 3A	N30-4008-45	PAN HEAD MACHINE SCREW	*
39 1A	N09-0291-05	SCREW	*
40 2C, 2D	N09-0326-05	SCREW	*
41 1D	N09-0327-05	SCREW	*
42 3B, 1D	N14-0115-05	NUT	*
43 3A	N14-0124-04	SPECIAL NUT	*
44 2D	S90-0032-05	REMOTE SWITCH SHAFT	*
45 2D	S90-0033-05	REMOTE SWITCH SHAFT	*
S1	S40-2103-15	PUSH SWITCH FIG46	*
Q1 -4	V01-1095-10	2SA1095 (R, O) FIG47	*
Q5 -8	V03-2565-10	2SC2565 (R, O) FIG48	*
-	W01-0077-15	WRENCH	*
-	W01-0090-05	CLEANING CLOTH	*
49 1C, 2D	X07-1770-10	POWER AMP PCB ASSY	*T
49 1C, 2D	X07-1770-10	POWER AMP PCB ASSY	E
49 1C, 2D	X07-1770-21	POWER AMP PCB ASSY	KP
49 1C, 2D	X07-1770-21	POWER AMP PCB ASSY	UM
49 1C, 2D	X07-1770-21	POWER AMP PCB ASSY	X
50 3D	X08-1750-10	PRE AMP PCB ASSY	*
51 2D	X09-1380-10	AUDIO AMP PCB ASSY	*
52 2A, 1B	X13-2650-10	SWITCH PCB ASSY	*T
52 2A, 1B	X13-2650-10	SWITCH PCB ASSY	E
52 2A, 1B	X13-2650-21	SWITCH PCB ASSY	KP
52 2A, 1B	X13-2650-21	SWITCH PCB ASSY	UM
52 2A, 1B	X13-2650-21	SWITCH PCB ASSY	X
53 2B	X13-2660-10	SUB PCB ASSY	*
POWER AMP (X07-1770-xx)			
C1 -4	C49-2015-35	POLYSTY 0.015UF J	
C5 ,6	C49-2039-35	POLYSTY 0.039UF J	
C7 -10	C54-2710-39	CERAMIC 0.01UF P	
C11	C90-0458-05	ELECTRO 47UF 10WV	
C12	C24-1210-61	ELECTRO 10UF 16WV	
C13	C25-1233-77	ELECTRO 330UF 16WV	
C14	C24-1747-51	ELECTRO 4.7UF 35WV	
C15	C24-1410-61	ELECTRO 10UF 25WV	
C16	C24-1022-71	ELECTRO 220UF 10WV	
C17 ,18	C49-2022-25	POLYSTY 2200PF J	
C19 ,20	C49-2010-34	MYLAR 0.01UF G	
C23 -26	C71-1710-15	CERAMIC 100PF J	
C29 ,30	C90-0451-05	ELECTRO 220UF 10WV	
C31 ,32	C49-2039-35	POLYSTY 0.039UF	
101 1D	E20-0444-05	SPEAKER TERMINAL	
L1 ,2	L39-0082-05	COIL	
R1 -4	R43-1233-05	FL-PROOF RD33	
R5 -8	R43-1222-15	FL-PROOF RD220	
R9 -12	R43-1247-15	FL-PROOF RD470	
R13 -16	R43-1222-05	FL-PROOF RD22	
R17 -20	R47-5422-95	FL-PROOF RS2.2	
R21 -24	R43-1230-05	FL-PROOF RD30	
R33 -40	R43-1247-95	FL-PROOF RD4.7	
R41 -48	R92-0203-05	METAL 0.47	
R49 -52	R92-0202-05	METAL 0.1	
R53 ,54	R47-5610-05	FL-PROOF RS10	
R64	R47-5439-25	FL-PROOF RS3.9K	
R67 ,68	R47-5510-25	FL-PROOF RS1K	
R72	R47-5515-25	FL-PROOF RS1.5K	
R73 ,74	R47-5510-05	FL-PROOF RS10	
R83 ,84	R47-5510-05	FL-PROOF RS10	
-	S59-1048-05	THERMAL SWITCH	
-	S59-1048-05	THERMAL SWITCH	
-	S59-1048-05	THERMAL SWITCH	
RL1	S51-2041-05	RELAY	
RL2	S51-2040-05	RELAY	
RL3	S51-2041-05	RELAY	
D1 ,2	V11-5100-80	STV-2H(W)	
D3 ,4	V11-5100-40	STV-4H(G)	
D5 -14	V11-0273-05	1S2076A	
D15 ,16	V11-2101-20	M4C-41-12*1	
D17	V11-0271-05	1S2076	
D18	V11-0295-05	W06B	
D19	V11-0271-05	1S2076	
D20	V11-0200-05	V06C	
D21	V11-9727-05	BZ-100	
D22	V11-0247-05	WZ-100	
IC1	V30-0291-10	HA12002	
Q1 ,2	V03-0297-05	2SC945	
Q3 ,4	V03-1845-00	2SC1845	
Q5 ,6	V01-0733-90	2SA733 (A)	
Q7 ,8	V03-2631-10	2SC2631 (Q, R, S)	
Q9 ,10	V01-1123-10	2SA1123 (Q, R, S)	
Q11 ,12	V03-2591-10	2SC2591 (Q, R) FIG102	
Q13 ,14	V01-1111-10	2SA1111 (Q, R) FIG103	
Q15 ,16	V01-0733-90	2SA733 (A)	
Q17	V01-1023-00	2SA1023	
PREAMP (X08-1750-10)			
C1 -4	C90-0452-05	ELECTRO 100UF	6.
C5 ,6	C91-0062-05	POLYSTY 100PF	K
C7 -10	C90-0461-05	ELECTRO 2.2UF	50
C11 -14	C91-0090-05	POLYSTY 150PF	J
C15 -18	C90-0451-05	ELECTRO 220UF	10
C19 ,20	C90-0463-05	ELECTRO 2.2UF	35
C21 ,22	C90-0407-05	ELECTRO 220UF	16
C23 ,24	C90-0462-05	ELECTRO 330UF	16
C25 -28	C90-0400-05	ELECTRO 100UF	25
C29 ,30	C90-0442-05	ELECTRO 100UF	16
C31 ,32	C91-0092-05	POLYSTY 220PF	J
C33 ,34	C91-0100-05	POLYSTY 1000PF	J
C35 ,36	C91-0061-05	POLYSTY 82PF	K
C39 ,40	C49-2018-43	POLYSTY 0.18UF	J
C41 ,42	C49-2051-33	POLYSTY 0.051UF	J

PARTS LIST

ption / 規格	Re- marks 備考
WARE	
WARE	
T T T T	*K PU MX TE *K
	PU MX E T *
	P T K U U *
N UAL UAL UAL UAL	X *K U PM X
N UAL UAL NS' LIST	T E U *
FX2 63WV	*
JG 16P	*
(L) (R)	*
	*T E KP UM X

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
-	H12-0073-03	PACKING FIXTURE	*
-	H12-0074-04	PACKING FIXTURE	*
-	H12-0075-04	PACKING FIXTURE	*
-	H20-0458-04	COVER	KP
-	H20-0458-04	COVER	UX
-	H20-0458-04	COVER	TE
-	H20-0459-04	COVER	M
-	H25-0029-04	BAG	
-	H25-0078-04	BAG	
-	H40-0004-04	ANTI-RUST PAPER	
30 3B	J02-0098-04	FOOT	
31 3A	K21-0381-04	KNOB(VOLUME)	*
32 2B	K21-0382-04	KNOB(LOUD,REC,BALANCE)	*
33 2B	K27-0114-03	KNOB(OUTPUT,INPUT)	*
34 2B	K27-0115-03	KNOB(POWER)	*
35 2A,2B	K27-0116-04	KNOB(PUSHBUTTON)X5	*
36 2B	K27-0117-04	KNOB(SELECTOR,BALANCE)	*
37 1B	N09-0323-04	SCREW	
38 3A	N09-0324-04	SCREW	
38 3A	N30-4008-45	PAN HEAD MACHINE SCREW	
39 1A	N09-0291-05	SCREW	
40 2C,2D	N09-0326-05	SCREW	*
41 1D	N09-0327-05	SCREW	
42 3B,1D	N14-0115-05	NUT	
43 3A	N14-0124-04	SPECIAL NUT	
44 2D	S90-0032-05	REMOTE SWITCH SHAFT	*
45 2D	S90-0033-05	REMOTE SWITCH SHAFT	*
S1	S40-2103-15	PUSH SWITCH FIG46	*
Q1 -4	V01-1095-10	2SA1095(R,O) FIG47	*
Q5 -8	V03-2565-10	2SC2565(R,O) FIG48	*
-	W01-0077-15	WRENCH	
-	W01-0090-05	CLEANING CLOTH	
49 1C,2D	X07-1770-10	POWER AMP PCB ASSY	*T
49 1C,2D	X07-1770-10	POWER AMP PCB ASSY	E
49 1C,2D	X07-1770-21	POWER AMP PCB ASSY	KP
49 1C,2D	X07-1770-21	POWER AMP PCB ASSY	UM
49 1C,2D	X07-1770-21	POWER AMP PCB ASSY	X
50 3D	X08-1750-10	PRE AMP PCB ASSY	*
51 2D	X09-1380-10	AUDIO AMP PCB ASSY	*
52 2A,1B	X13-2650-10	SWITCH PCB ASSY	*T
52 2A,1B	X13-2650-10	SWITCH PCB ASSY	E
52 2A,1B	X13-2650-21	SWITCH PCB ASSY	KP
52 2A,1B	X13-2650-21	SWITCH PCB ASSY	UM
52 2A,1B	X13-2650-21	SWITCH PCB ASSY	X
53 2B	X13-2660-10	SUB PCB ASSY	*
POWER AMP (X07-1770-xx)			
C1 -4	C49-2015-35	POLYSTY 0.015UF J	
C5 -6	C49-2039-35	POLYSTY 0.039UF J	
C7 -10	C54-2710-39	CERAMIC 0.01UF P	
C11	C90-0458-05	ELECTRO 47UF 10WV	
C12	C24-1210-61	ELECTRO 10UF 16WV	
C13	C25-1233-77	ELECTRO 330UF 16WV	
C14	C24-1747-51	ELECTRO 4.7UF 35WV	
C15	C24-1410-61	ELECTRO 10UF 25WV	
C16	C24-1022-71	ELECTRO 220UF 10WV	
C17 ,18	C49-2022-25	POLYSTY 2200PF J	
C19 ,20	C49-2010-34	MYLAR 0.01UF G	
C23 -26	C71-1710-15	CERAMIC 100PF J	
C29 ,30	C90-0451-05	ELECTRO 220UF 10WV	

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
C31 ,32	C49-2039-35	POLYSTY 0.039UF J	
101 1D	E20-0444-05	SPEAKER TERMINAL	*
L1 ,2	L39-0082-05	COIL	
R1 -4	R43-1233-05	FL-PROOF RD33 J 2E	
R5 -8	R43-1222-15	FL-PROOF RD220 J 2E	
R9 -12	R43-1247-15	FL-PROOF RD470 J 2E	
R13 -16	R43-1222-05	FL-PROOF RD22 J 2E	
R17 -20	R47-5422-95	FL-PROOF RS2,2 J 3A	
R21 -24	R43-1230-05	FL-PROOF RD30 J 2E	
R33 -40	R43-1247-95	FL-PROOF RD4,7 J 2E	
R41 -48	R92-0203-05	METAL 0,47 K 3H	
R49 -52	R92-0202-05	METAL 0,1 K 3H	
R53 ,54	R47-54610-05	FL-PROOF RS10 J 3F	
R64	R47-5439-25	FL-PROOF RS3,9K J 3A	
R67 ,68	R47-5510-25	FL-PROOF RS1K J 3D	
R72	R47-5515-25	FL-PROOF RS1,5K J 3D	
R73 ,74	R47-5510-05	FL-PROOF RS10 J 3D	
R83 ,84	R47-5510-05	FL-PROOF RS10 J 3D	
-	S59-1048-05	THERMAL SWITCH	KP
-	S59-1048-05	THERMAL SWITCH	UM
-	S59-1048-05	THERMAL SWITCH	X
RL1	S51-2041-05	RELAY	*
RL2	S51-2040-05	RELAY	
RL3	S51-2041-05	RELAY	*
D1 ,2	V11-5100-80	STV-2H(W)	
D3 ,4	V11-5100-40	STV-4H(G)	
D5 -14	V11-0273-05	1S2076A	
D15 ,16	V11-2101-20	M4C-41-12*1	
D17	V11-0271-05	1S2076	
D18	V11-0295-05	W06B	
D19	V11-0271-05	1S2076	
D20	V11-0200-05	V06C	
D21	V11-9727-05	BZ-100	
D22	V11-0247-05	WZ-100	
IC1	V30-0291-10	HA12002	
Q1 ,2	V03-0297-05	2SC945	
Q3 ,4	V03-1845-00	2SC1845	
Q5 ,6	V01-0733-90	2SA733(A)	
Q7 ,8	V03-2631-10	2SC2631(Q,R,S)	*
Q9 ,10	V01-1123-10	2SA1123(Q,R,S)	*
Q11 ,12	V03-2591-10	2SC2591(Q,R) FIG102	*
Q13 ,14	V01-1111-10	2SA1111(Q,R) FIG103	*
Q15 ,16	V01-0733-90	2SA733(A)	
Q17	V01-1023-00	2SA1023	
PREAMP (X08-1750-10)			
C1 -4	C90-0452-05	ELECTRO 100UF 6.3WV	*
C5 ,6	C91-0062-05	POLYSTY 100PF K	*
C7 -10	C90-0461-05	ELECTRO 2,2UF 50WV	*
C11 -14	C91-0090-05	POLYSTY 150PF J	*
C15 -18	C90-0451-05	ELECTRO 220UF 10WV	*
C19 ,20	C90-0463-05	ELECTRO 2,2UF 35WV	*
C21 ,22	C90-0407-05	ELECTRO 220UF 16WV	*
C23 ,24	C90-0462-05	ELECTRO 330UF 16WV	*
C25 -28	C90-0400-05	ELECTRO 100UF 25WV	*
C29 ,30	C90-0442-05	ELECTRO 100UF 16WV	*
C31 ,32	C91-0092-05	POLYSTY 220PF J	*
C33 ,34	C91-0100-05	POLYSTY 1000PF J	*
C35 ,36	C91-0061-05	POLYSTY 82PF K	*
C39 ,40	C49-2018-43	POLYSTY 0.18UF J	*
C41 ,42	C49-2051-33	POLYSTY 0.051UF J	*

PARTS LIST

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
C43 ,44	C91-0103-05	POLYSTY 2200PF J	*
C45 ,46	C91-0091-05	POLYSTY 180PF J	*
C47 ,48	C90-0450-05	ELECTRO 220UF 6.3WV	*
C49 ,50	C90-0454-05	ELECTRO 4,7UF 35WV	*
C51 ,52	C90-0460-05	ELECTRO 47UF 10WV	*
C53 ,54	C91-0100-05	POLYSTY 1000PF J	*
C55 ,56	C90-0397-05	ELECTRO 100UF 35WV	*
C57 ,58	C90-0456-05	ELECTRO 47UF 35WV	*
C59 -62	C90-0425-05	ELECTRO 100UF 10WV	*
C63 -66	C90-0456-05	ELECTRO 47UF 35WV	*
C67 ,68	C90-0449-05	ELECTRO 1700UF 42WV	*
C69 ,70	C54-2710-39	CERAMIC 0,01UF P	
C71 ,72	C90-0420-05	ELECTRO 2200UF 25WV	
C73 ,74	C54-2710-39	CERAMIC 0,01UF P	
C75 ,76	C91-0100-05	POLYSTY 1000PF J	*
201 3D	E13-0426-05	PHONO JACK	*
L1 -4	L33-0275-05	CHOCK COIL	
R1 ,2	R48-2210-15	RN 100 J 2E	
R15 ,16	R48-6251-15	RN 510 J 2E	
R17 ,18	R48-2210-05	RN 10 J 2E	
R29 ,30	R48-6256-05	RN 56 J 2E	
R31 -34	R43-1210-05	FL-PROOF RD10 J 2E	
R35 ,36	R48-2236-35	RN 36K J 2E	
R37 -40	R43-1212-15	FL-PROOF RD120 J 2E	
R41 -44	R47-5412-15	FL-PROOF RS120 J 3A	
R45 ,46	R43-1268-25	FL-PROOF RD6,8K J 2E	
R49 ,50	R48-2251-35	RN 51K J 2E	
R69 ,70	R48-2243-93	RN 24,3 F 2E	
R73 ,74	R47-5410-25	FL-PROOF RS1K J 3A	
R75 ,76	R48-2147-13	RN 1,47K F 2E	
R77 ,78	R48-2178-23	RN 17,8K F 2E	
R89 -92	R47-5410-05	FL-PROOF RS10 J 3A	
R93 ,94	R48-2215-35	RN 15K J 2E	
R95 ,96	R48-6227-15	RN 270 J 2E	
R113-116	R47-5512-15	FL-PROOF RS120 J 3D	
R121,122	R48-6227-15	RN 270 J 2E	
VR1 ,2	R12-0502-05	TRIMMING POT 100 OFFSET	
RL1	S51-2039-05	RELAY	
D1 ,2	V11-2200-10	SV-22	
D3 -6	V11-7101-60	EQA01-11(R1)	
D7 -10	V11-9994-05	EQB01-13	
D11 ,12	V11-0375-05	EQA01-15	
D13 ,14	V11-7101-50	EQA01-10(R)	
D15 -20	V11-0271-05	1S2076	
D21 ,22	V11-2200-10	SV-22	
D23 -26	V11-7101-40	EQA01-05(T2)	
D27	V11-0271-05	1S2076	
D28 ,29	V11-5100-60	RB-151	
Q1 ,2	V03-2545-10	2SC2545(D,E)	*
Q3 ,4	V01-1083-10	2SA1083(D,E)	*
Q5 ,6	V01-0999-10	2SA999(E,F)	*
Q7 ,8	V03-2320-10	2SC2320(E,F)	*
Q9 ,10	V03-2003-20	2SC2003(M,L)	*
Q11 ,12	V01-0954-20	2SA954(M,L)	
Q13 ,14	V09-0141-00	2SK146	
Q15 ,16	V03-2291-20	2SC2291(F,G)	
Q17 ,18	V01-0995-10	2SA995(F,G)	
Q19 ,20	V03-2320-10	2SC2320(E,F)	
Q21 -24	V01-0999-10	2SA999(E,F)	
Q25 ,26	V01-0992-10	2SA992(F,E)	

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格
Q27 ,28	V03-1845-10	2SC1845(F,E)
Q29 ,30	V03-0452-05	2SC1735
Q31 ,32	V01-0173-05	2SA850
Q33 ,34	V03-2320-10	2SC2320(E,F)
Q35 -38	V01-0999-10	2SA999(E,F)
Q39 ,40	V03-2320-10	2SC2320(E,F)
Q41 ,42	V02-0724-00	2SB724
Q43 ,44	V04-0762-00	2SD762
AUDIO (X09-1380-10)		
C1 ,2	C49-2030-45	POLYSTY 0.3UF J
C3 ,4	C49-2039-45	POLYSTY 0.39UF J
C5 ,6	C91-0092-05	POLYSTY 220PF J
C7 ,8	C49-2010-45	POLYSTY 0.1UF J
C9 ,10	C49-2043-35	POLYSTY 0.043UF J
C13 ,14	C91-0055-05	POLYSTY 27PF K
C15 ,16	C90-0429-05	ELECTRO 100UF 25WV
C17 ,18	C90-0459-05	ELECTRO 33UF 25WV
C19 ,20	C90-0464-05	ELECTRO 33UF 10WV
C21 ,22	C91-0094-05	POLYSTY 330PF J
C25 ,26	C90-0397-05	ELECTRO 100UF 35WV
C27 ,28	C91-0052-05	POLYSTY 15PF K
C31 ,32	C91-0048-05	POLYSTY 5PF F
C33 ,34	C71-1705-01	CERAMIC 5PF C
C35 ,36	C91-0054-05	POLYSTY 22PF K
C37 ,38	C91-0058-05	POLYSTY 47PF K
C41 ,42	C91-0050-05	POLYSTY 10PF K
C43 ,44	C91-0093-05	POLYSTY 270PF J
C45 -48	C90-0432-05	ELECTRO 100UF 63WV
C49 ,50	C49-2022-45	MYLAR 0,22UF J
C51 -54	C25-1433-67	LL-ELEC 33UF 16WV
C52	C25-1210-67	LL-ELEC 10UF 16WV
C55	C25-1222-67	LL-ELEC 22UF 16WV
C57 ,58	C91-0092-05	POLYSTY 220PF J
301 1D	E06-0514-05	DIN CONNECTOR
302 2D	E13-0425-05	PHONO JACK
L1 -4	L33-0275-05	CHOCK COIL
R1 ,2	R48-2239-45	RN 390K J 2E
R3 ,4	R48-6210-45	RN 100K J 2E
R9 ,10	R48-2233-15	RN 330 J 2E
R11 ,12	R48-6210-45	RN 100K J 2E
R13 ,14	R48-6247-23	RN 4,7K J 2E
R17 ,18	R48-6243-25	RN 4,3K J 2E
R19 ,20	R48-2215-35	RN 15K J 2E
R25 ,26	R48-2210-15	RN 100 J 2E
R27 ,28	R48-2233-45	RN 330K J 2E
R29 ,30	R48-2230-25	RN 3K J 2E
R31 ,32	R48-6233-05	RN 33 J 2E
R33 ,34	R48-6268-15	RN 680 J 2E
R35 -38	R48-6239-35	RN 39K J 2E
R39 ,40	R47-5424-25	FL-PROOF RS2,4K J 3A
R41 ,42	R48-2251-05	RN 51 J 2E
R43 ,44	R48-6233-05	RN 33 J 2E
R45 ,46	R48-2222-25	RN 2,2K J 2E
R47 ,48	R47-1415-25	FL-PROOF RS1,5K J 3A
R49 ,50	R48-2230-25	RN 3K J 2E
R51 ,52	R48-2475-93	RN 47,5 F 2E
R55 ,56	R43-1247-25	FL-PROOF RD4,7K J 2E
R61 ,62	R48-2681-13	RN 6,81K F 2E
R63 ,64	R47-5427-25	FL-PROOF RS2,7K J 3A
R65 ,66	R47-5468-25	FL-PROOF RS6,8K J 3A
R67 ,68	R43-1222-15	FL-PROOF RD220 J 2E

PARTS LIST

Ref. No.	Parts No.	Description	Ref. No.	Parts No.	Description
參照番号	部品番号	部品名 / 規格	參照番号	部品番号	部品名 / 規格
C43 ,44	C91-0103-05	POLYSTY 2200PF J	Q27 ,28	V03-1845-10	2SC1845 (F,E)
C45 ,46	C91-0091-05	POLYSTY 180PF J	Q29 ,30	V03-0452-05	2SC1735
C47 ,48	C90-0450-05	ELECTRO 220UF 6,3WV	Q31 ,32	V01-0173-05	2SA850
C49 ,50	C90-0454-05	ELECTRO 4,7UF 35WV	Q33 ,34	V03-2320-10	2SC2320 (E,F)
C51 ,52	C90-0460-05	ELECTRO 47UF 10WV	Q35 ,38	V01-0999-10	2SA999 (E,F)
C53 ,54	C91-0100-05	POLYSTY 1000PF J	Q39 ,40	V03-2320-10	2SC2320 (E,F)
C55 ,56	C90-0397-05	ELECTRO 100UF 35WV	Q41 ,42	V02-0724-00	2SB724
C57 ,58	C90-0456-05	ELECTRO 47UF 35WV	Q43 ,44	V04-0762-00	2SD762
C59 ,62	C90-0425-05	ELECTRO 100UF 10WV			
C63 ,66	C90-0456-05	ELECTRO 47UF 35WV			
C67 ,68	C90-0449-05	ELECTRO 1700UF 42WV			
C69 ,70	C54-2710-39	CERAMIC 0,01UF P			
C71 ,72	C90-0420-05	ELECTRO 2200UF 25WV			
C73 ,74	C54-2710-39	CERAMIC 0,01UF P			
C75 ,76	C91-0100-05	POLYSTY 1000PF J			
201 3D	E13-0426-05	PHONO JACK			
L1 -4	L33-0275-05	CHOCK COIL			
R1 ,2	R48-2210-15	RN 100 J 2E			
R15 ,16	R48-6251-15	RN 510 J 2E			
R17 ,18	R48-2210-05	RN 10 J 2E			
R29 ,30	R48-6256-05	RN 56 J 2E			
R31 -34	R43-1210-05	FL-PROOF RD10 J 2E			
R35 ,36	R48-2236-35	RN 36K J 2E			
R37 -40	R43-1212-15	FL-PROOF RD120 J 2E			
R41 -44	R47-5412-15	FL-PROOF RS120 J 3A			
R45 ,46	R43-1268-25	FL-PROOF RD6,8K J 2E			
R49 ,50	R48-2251-35	RN 51K J 2E			
R69 ,70	R48-2243-93	RN 24,3 F 2E			
R73 ,74	R47-5410-25	FL-PROOF RS1K J 3A			
R75 ,76	R48-2147-13	RN 1,47K F 2E			
R77 ,78	R48-2178-23	RN 17,8K F 2E			
R89 -92	R47-5410-05	FL-PROOF RS10 J 3A			
R93 ,94	R48-2215-35	RN 15K J 2E			
R95 ,96	R48-6227-15	RN 270 J 2E			
R113-116	R47-5512-15	FL-PROOF RS120 J 3D			
R121,122	R48-6227-15	RN 270 J 2E			
VR1 ,2	R12-0502-05	TRIMMING POT 100 OFFSET			
RL1	S51-2039-05	RELAY			
D1 ,2	V11-2200-10	SV-22			
D3 -6	V11-7101-60	EQA01-11 (R1)			
D7 -10	V11-9994-05	EQB01-13			
D11 ,12	V11-0375-05	EQA01-15			
D13 ,14	V11-7101-50	EQA01-10 (R)			
D15 -20	V11-0271-05	1S2076			
D21 ,22	V11-2200-10	SV-22			
D23 -26	V11-7101-40	EQA01-05 (T2)			
D27	V11-0271-05	1S2076			
D28 ,29	V11-5100-60	RB-151			
Q1 ,2	V03-2545-10	2SC2545 (D,E)			
Q3 ,4	V01-1083-10	2SA1083 (D,E)			
Q5 ,6	V01-0999-10	2SA999 (E,F)			
Q7 ,8	V03-2320-10	2SC2320 (E,F)			
Q9 ,10	V03-2003-20	2SC2003 (M,L)			
Q11 ,12	V01-0954-20	2SA954 (M,L)			
Q13 ,14	V09-0141-00	2SK146			
Q15 ,16	V03-2291-20	2SC2291 (F,G)			
Q17 ,18	V01-0995-10	2SA995 (F,G)			
Q19 ,20	V03-2320-10	2SC2320 (E,F)			
Q21 -24	V01-0999-10	2SA999 (E,F)			
Q25 ,26	V01-0992-10	2SA992 (F,E)			

PARTS LIST

Ref. No.	Parts No.	Description	Re- marks
参照番号	部品番号	部品名 / 規格	備考
R69 ,70 R71 ,72 R73 ,74 R100 R103	R43-1210-15 R43-1247-15 R43-1222-15 R47-5418-15 R47-5418-15	FL-PROOF RD100 J 2E FL-PROOF RD470 J 2E FL-PROOF RD220 J 2E FL-PROOF RS180 J 3A FL-PROOF RS180 J 3A	
VR1 VR2 ,3 VR4 ,5	R10-4002-05 R12-0502-05 R12-0003-05	POTENTIOMETER VOLUME TRIMMING POT. OFFSET TRIMMING POT. BIAS	*
RL1 -4 S1 S2 ,3	S51-2039-05 S90-0028-05 S90-0029-05	RELAY SLIDE SWITCH FIG303 SLIDE SWITCH FIG304	* *
D1 D3 -16 D17 ,18 D19 ,20 D21 ,22	V11-0271-05 V11-0271-05 V11-0287-05 V11-4100-30 V11-4103-60	1S2076 1S2076 WZ-240 WZ-197 XZ-051	
D29 -37 Q1 ,2 Q3 ,4 Q5 ,6 Q7 -10	V11-0271-05 V03-2291-10 V09-0145-30 V03-2259-10 V01-1124-10	1S2076 2SC2291(G,H) UPA68H(L,M) 2SC2259(G,H) 2SA1124(R,S)	* *
Q11 ,12 Q13 -17 Q18 ,19	V03-2632-10 V01-0999-10 V03-2320-10	2SC2632(R,S) 2SA999(E,F) 2SC2320(E,F)	* *
SWITCH (X13-2650-xx)			
PL1 -8 PL9 -12 PL13-15 PL16-19	B30-0219-05 B30-0211-05 B30-0219-05 B30-0211-05	LAMP(12V,0.08A) FIG406 LAMP(12V,0.04A) FIG401 LAMP(12V,0.08A) FIG406 LAMP(12V,0.04A) FIG401	* * * *
C1 ,2 C3 -6 C7 C8	C55-1710-38 C22-1247-71 C24-1247-61 C24-1022-71	CERAMIC 0.01UF Z ELECTRO 470UF 16WV ELECTRO 47UF 16WV ELECTRO 220UF 10WV	
R2 R3 ,4	R43-1227-15 R47-1415-95	FL-PROOF RD270 J 2E RS 1.5 J 3A	
S1 S2 S3 S4	S42-2027-15 S42-4012-05 S42-2028-05 S42-3034-05	PUSH SWITCH FIG402 PUSH SWITCH FIG403 PUSH SWITCH FIG404 PUSH SWITCH FIG405	* * * *
D1 D2 D3 D3 D3	V11-5100-60 V11-7101-30 V11-0271-05 V11-0271-05 V11-0271-05	RB-151 EqA01-10(S1) 1S2076 1S2076 1S2076	KP UM X
Q1 ,2	V04-0855-10	2SD855(BD)	
SUB (X13-2660-10)			
S01 18 R1 ,2 VR1 502 S1 503	E11-0074-05 R47-5468-15 R10-6001-05 S40-4029-05	PHONE JACK FL-PROOF RS680 J 3A POTENTIOMETER BALANCE PUSH SWITCH	* *

Ref. No.	Parts No.	Description	Re- marks
参照番号	部品番号	部品名 / 規格	備考
L-01A POWER SUPPLY UNIT			
1 3A 2 2A 3 3B 4 1B 5 2B	- - - - -	SUB PANEL MOUNTING HARDWARE(D) MAIN CHASSIS REAR PANEL BOTTOM PLATE	
6 1B 7 1B 8 1A 9 2B 10 1B	- - - - -	ESCUTCHEON RECTANGULAR PLUG REINFORCING HARDWARE MOUNTING HARDWARE(A) MOUNTING HARDWARE(B)	
11 1B 12 3B	- -	MOUNTING HARDWARE(C) SPACER	
13 1A 14 3A 15 2A,3B	A03-0252-02 A20-1549-04 A50-0073-02	WOODEN CABINET PANEL SIDE PLATE	* *
16 3A 17 2A 31 3A	B10-0259-03 B30-0210-05 B09-0015-04	FRONT GLASS LED CAP	* *
C1 C1 C1	C91-0023-05 C91-0023-05 C91-0079-05	CERAMIC 0.01UF AC250V CERAMIC 0.01UF AC250V CERAMIC 0.01UF AC125V	UM XH KP
18 1B 18 1B 18 1B 18 1B 19 1B	E03-0013-05 E03-0013-05 E03-0013-05 E03-0014-05 E30-0185-05	AC OUTLET AC OUTLET AC OUTLET AC OUTLET POWER CORD	KU MX H P X
19 1B 19 1B 19 1B 19 1B 19 1B	E30-0290-05 E30-0291-05 E30-0291-05 E30-0580-05 E30-0587-05	POWER CORD POWER CORD POWER CORD POWER CORD POWER CORD	KP UM H E T
20 1B	E30-0634-00	16P CORD WITH CONNECTOR	*
- - - - -	H01-3103-04 H12-0076-03 H12-0077-03 H12-0078-04 H20-0460-04	CARTON BOX PACKING FIXTURE PACKING FIXTURE PACKING FIXTURE COVER	* * * *
- -	H39-0015-05 H40-0004-04	PACKING PARTS ANTI-RUST PAPER	M
21 3B 22 2A 23 2B 24 1B 24 1B	J02-0104-04 J19-0509-04 J19-0514-05 J41-0024-15 J41-0033-05	FOOT LED HOLDER PC SUPPORT BUSHING BUSHING	X KP
24 1B 24 1B 24 1B	J41-0033-05 J42-0078-05 J42-0078-05	BUSHING BUSHING BUSHING	TE UM H
25 2B 25 2B 25 2B 25 2B 25 2B	L01-1951-05 L01-1951-05 L01-1952-05 L01-1955-05 L01-1955-05	POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER	*K P T UM XH
25 2B 26 2A 26 2A 26 2A 26 2A	L01-1956-05 L01-1961-05 L01-1961-05 L01-1962-05 L01-1965-05	POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER	E *K P T UM

PARTS LIST

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
26 2A	L01-1965-05	POWER TRANSFORMER	XH
26 2A	L01-1966-05	POWER TRANSFORMER	E
27 3A	L01-1971-05	POWER TRANSFORMER	*K
27 3A	L01-1972-05	POWER TRANSFORMER	T
27 3A	L01-1975-05	POWER TRANSFORMER	UM
27 3A	L01-1975-05	POWER TRANSFORMER	XH
27 3A	L01-1976-05	POWER TRANSFORMER	E
27 3A	L01-1977-05	POWER TRANSFORMER	P
28 1A	N09-0323-04	SCREW	
29 3A	N09-0324-04	SCREW	
29 3A	N30-4008-45	PAN HEAD MACHINE SCREW	
30 3B	N09-0328-05	SCREW	
31 3A	N14-0124-04	SPECIAL NUT	
33 1B	S31-2050-05	SLIDE SWITCH	UM
33 1B	S31-2050-05	SLIDE SWITCH	XE
33 1B	S31-2050-05	SLIDE SWITCH	H
32 1B	X00-2080-11	POWER SUPPLY PCB ASSY	*K
32 1B	X00-2080-11	POWER SUPPLY PCB ASSY	P
32 1B	X00-2080-51	POWER SUPPLY PCB ASSY	T
32 1B	X00-2080-81	POWER SUPPLY PCB ASSY	UM
32 1B	X00-2080-81	POWER SUPPLY PCB ASSY	XH
32 1B	X00-2082-71	POWER SUPPLY PCB ASSY	E
POWER SUPPLY (X00-2080-xx)			
C1	C54-2710-39	CERAMIC 0.01UF P	
C2	C24-1247-71	ELECTRO 470UF 16WV	
C3 1/4	C54-2710-39	CERAMIC 0.01UF P	T
C3	C54-2710-39	CERAMIC 0.01UF P	E
C3	C91-0023-05	CERAMIC 0.01UF AC250V	UM
C3	C91-0023-05	CERAMIC 0.01UF AC250V	XH
C3 1/4	C91-0079-05	CERAMIC 0.01UF AC125V	KP
F1	F05-5021-05	FUSE(5A)	KP
F1 1/2	F05-5022-05	FUSE(5A)	UM
F1 1/2	F05-5022-05	FUSE(5A)	XH
F1 1/2	F05-5024-05	FUSE(5A)	E
F3	F05-1021-05	FUSE(1A)	KP
F3	F05-1023-05	FUSE(1A)	UM
F3	F05-1023-05	FUSE(1A)	XH
F3	F06-1021-05	FUSE(1A)	E
F4 1/5	F05-2521-05	FUSE(2.5A)	UM
F4 1/5	F05-2521-05	FUSE(2.5A)	XH
F4 1/5	F05-2528-05	FUSE(2.5A)	TE
F6	F05-5013-05	FUSE(0.5A)	UM
F6	F05-5013-05	FUSE(0.5A)	XH
F6 1/7	F05-5015-05	FUSE(0.5A)	TE
F6	F05-5021-05	FUSE(5A)	KP
101 1B	J13-0054-05	FUSE HOLDER	TE
101 1B	J13-0055-05	FUSE HOLDER X6	KP
101 1B	J13-0055-05	FUSE HOLDER X12	UM
101 1B	J13-0055-05	FUSE HOLDER X6	T
105 1B	J13-0055-05	FUSE HOLDER X12	XH
105 1B	J13-0055-05	FUSE HOLDER X12	E
R2	R47-5427-05	FL-PROOF RS27 J 3A	
RL1	S51-1027-05	RELAY	*U
RL1	S51-1027-05	RELAY	MX
RL1	S51-1027-05	RELAY	HE
RL1 1/2	S51-1027-05	RELAY	T
RL1 1/2	S51-1028-05	RELAY	*K
RL1 1/2	S51-1028-05	RELAY	P
D1 -5	V11-0295-05	W06B	

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

Region	Code
U.S.A.	K
Canada.	P
PX.	U
Australia.	X
Europe & Scandinavia.	E
England.	T
South Africa.	S
Other Areas.	M
Audio Club.	H

There is no plan for producing units of S type.